CRPL-F 218 PART B

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PART B

SOLAR - GEOPHYSICAL DATA

ISSUED
OCTOBER 1962

U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

CRPL-F 218
PART B

NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

Issued
31 Oct. 1961

SOLAR - GEOPHYSICAL DATA

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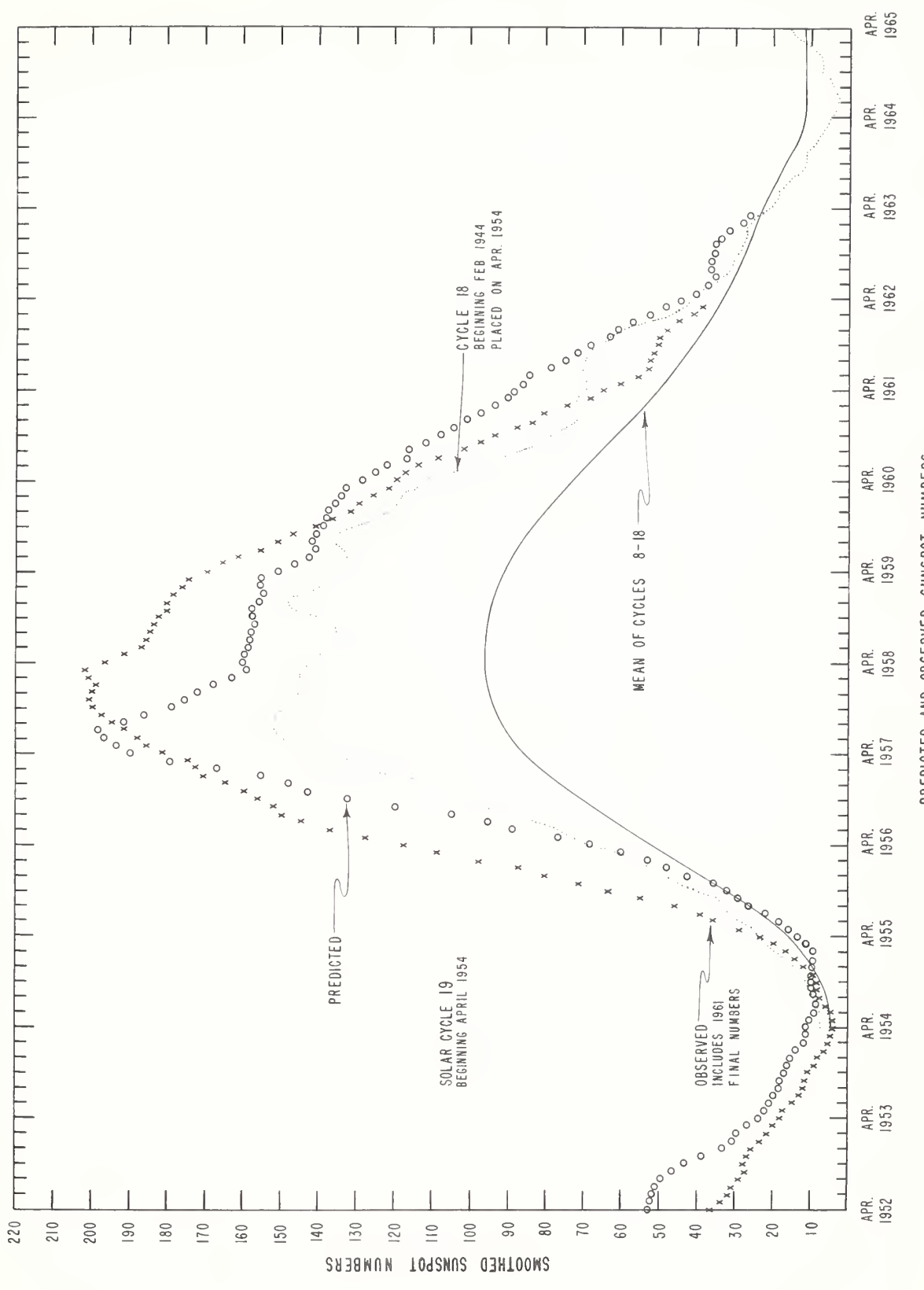
The descriptive text was republished November 1961.
Addenda to the text were published February 1962.

Aug. 1962	American Relative Sunspot Numbers R_A'
1	0
2	0
3	5
4	8
5	3
6	5
7	2
8	1
9	0
10	0
11	1
12	12
13	22
14	40
15	43
16	45
17	42
18	40
19	34
20	25
21	28
22	23
23	19
24	12
25	6
26	0
27	0
28	1
29	2
30	14
31	27
Mean:	14.8

Sept. 1962	Zürich Provisional Relative Sunspot Numbers R_Z	Daily Values Solar Flux at 2800 Mc, Ottawa, Canada Flux
1	48	84
2	57	93
3	81	98
4	88	99
5	90	98
6	82	100
7	71	100
8	59	97
9	58	94
10	44	91
11	51	90
12	62	93
13	59	92
14	53	95
15	60	93
16	42	91
17	33	78*
18	35	86
19	24	84
20	24	84
21	32	83
22	32	81
23	41	82
24	54	82
25	53	84
26	55	84
27	51	84
28	47	83
29	36	86
30	46	90
31		
Mean:	52.3	89.3

* = Doubtful, Receiver Trouble



PREDICTED AND OBSERVED SUNSPOT NUMBERS

CALCIUM PLAGE AND SUNSPOT REGIONS

SEPTEMBER 1962

CMP Sept. 1962	Lat	McMath Plage Number	Return of Region	Calcium Plage Data				Sunspot Data		
				CMP Values Area	Int.	History, Age		CMP Values Area	Count	History
02.0	N10	6536	6504	500	3	ℓ — ℓ	2			
02.4	S07	6538	New	1,400	2	ℓ ∧ ℓ	1	110	3	ℓ ⟍ ℓ
02.6	N09	6542	New	1,500	3.5	b ∧ ℓ	1	410	28	b ⟋ ℓ
04.5	N17	6544	6507	500	1.5	b — d	4			
05.8	N17	6547	6511	600	2	b — d	2	10	1	b — d
08.6	N05	6546	*	2,700	3	ℓ ⟍ ℓ	1,2	390	7	ℓ — ℓ
09.5	S12	6548	New	(1,800)	(3)	ℓ ∧ ℓ	1	320	7	b ⟍ ℓ
10.0	S08	6549	New	700	2.5	b — ℓ	1			
12.6	S09	6554	New	600	3	b — d	1	20	2	b — d
14.7	N23	6551	**	600	3	ℓ — d	1	30	3	b — d
14.8	S14	6550	6529	1,300	2.5	ℓ ∧ ℓ	2			
15.6	N01	6552	***	1,200	3	ℓ ⟍ ℓ	2			
17.0	N23	6553	New	3,300	3.5	ℓ ⟋ ℓ	1	390	6	ℓ ∧ ℓ
18.2	N14	6556	New	400	2.5	ℓ — d	1			
19.0	N02	6557	6524	400	2	b — d	4			
20.6	N00	6563a	+	(500)	(2)	b ⟋ ℓ	1			
20.8	S18	6558	6540	700	3	b ⟋ ℓ	2	60	2	b — d
21.8	N19	6561	New	(200)	(2)	b ⟋ ℓ	1			
22.6	S17	6563b	+	(400)	(2.5)	b ⟋ ℓ	1			
24.6	N14	6559a	++	300	3.5	b ⟍ d	1			
26.6	N09	6560	New	2,000	3.5	b ⟋ ℓ	1	280	4	b — d
29.6	N14	6559b	New	(800)	(3)	b ∧ ℓ	1	40	3	b — d
29.6	N12	6562	+++	4,100	3	ℓ ⟍ ℓ	2,3			

* Partly 6514 and partly new

** New in position of 6518

*** 6516 and 6522

\+ The numbers 6559 and 6563 were each used inadvertently for two different regions, these separate regions are now being designated as 6559a and 6559b, and 6563a and 6563b

++ New and ephemeral

+++ 6536 and 6542

MT. WILSON MAGNETIC CLASSIFICATIONS OF SUNSPOTS

SEPTEMBER 1962

Sept. 1962	Time Meas.	Lat.	Mer. Dist.	Type		Sept. 1962	Time Meas.	Lat.	Mer. Dist.	Type
1	1710	S07	E07	βγ		10	1910	N06	W40	αp
		N10	E13	β				S13	W18	βp
		N06	E81	αp				N22	E55	αf
2		S07	W06	βγ		11	1655	N06	W52	αp
		N10	W02	β				S14	W30	βp
		N05	E68	αp				N23	E41	βf
								N21	E71	βγ
3	1700	S07	W20	β						
		N10	W15	βγ		13	0105	N06	W70	αp
		N06	E55	αp				S14	W50	αp
		S14	E79	βp				S10	W03	βp
								N21	E51	βp
5	1655	S08	W45	αf						
		N10	W40	βp		14	1955	N21	E28	βγ
		N13	E04	αf				N12	E45	αp
		N05	E28	αp						
						16	0035	N21	E12	βf
6	1625	N10	W54	βp						
		S07	W58	αf		17	0035	N22	W00	β
		N14	W10	αf			1705	N21	W09	β
		N05	E15	αp						
		N05	E26	αp		27	2240	N14	W53	αf
		S14	E36	βp				N09	W18	βp
		S08	E44	αp						
						28	2355	N08	W33	βp
7	1635	N11	W68	βp				N13	W03	αp
		N14	W24	αp						
		N05	E01	βp		29	1645	N08	W42	βp
		S14	E23	βp				N11	W13	βf*
								S10	E40	αp
8	2340	N06	W16	αp				N10	E68	β
		S13	E06	β				N08	E70	αp
		N23	E74	β						
						30	1830	N09	W60	αp
9	1645	N06	W25	αp				S12	E24	αp
		S13	W03	β				N10	E54	βf
		N24	E67	β				N07	E57	αp

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* Normal for Southern Hemisphere (Reversed).

PROVISIONAL CORONAL LINE EMISSION INDICES

SEPTEMBER 1962

GMT Sep 1962	North East Quadrant (observed 7 days earlier)				South East Quadrant (observed 7 days earlier)				South West Quadrant (observed 7 days later)				North West Quadrant (observed 7 days later)			
	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1
1	33	81	24a	43a	14	25	26a	45a	20	40	X	X	17	23	X	X
2	13	22	26	35	15	28	24	35	34	84	29	61	45	64	16	20
3	22	36	11	15	29	56	21	30	22	31	14	20	39	73	16	26
4	20	30	11	15	15	28	17	20	10	11	28a	35a	36	39	18a	25a
5	26	39	12	15	17	28	22	30	11	22	22a	34a	37	53	11a	21a
6	48a	60a	25a	30a	21a	25a	20a	24a	16	22	X	X	26	36	X	X
7	38	67	23a	60a	14	22	17a	20a	X	X	X	X	X	X	X	X
8	50	120	34	64	21	48	20	25	45	67	15	19	32	62	13	25
9	41	92	24	40	25	70	21	36	49	80	14	22	23	35	15	25
10	17	22	X	X	27	64	X	X	22	34	20a	22a	16	20	13a	15a
11	X	X	X	X	X	X	X	X	16	36	22a	29a	20	31	15a	18a
12	X	X	15	30	X	X	26	34	20	40	20	33	26	31	9	11
13	25	30	16a	27a	11	25	19a	21a	29	44	21	25	20	25	12	14
14	41	78	13	30	40	78	11	18	X	X	X	X	X	X	X	X
15	25	48	X	X	22	43	X	X	31	56	X	X	39	50	X	X
16	28	52	26	38	22	39	41	60	X	X	X	X	X	X	X	X
17	12	17	31	38	10	20	21	34	X	X	X	X	X	X	X	X
18	14	22	36	58	10	17	24	31	8	20	20	23	36	64	27	42
19	19	31	22a	35a	13	17	16a	24a	20	39	14	23	9	11	22	30
20	18a	25a	X	X	24a	34a	X	X	18	48	X	X	9	11	X	X
21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22	6	8	11	14	8	20	11	15	9	13	12	15	11	16	19	22
23	10	12	13	15	9	10	12	15	5	8	12	15	19	36	22	57
24	11	17	16	24	7	8	7	8	11	17	14	16	22	76	28	42
25	8	14	15a	20a	8	11	14a	16a	2	6	X	X	42	73	X	X
26	17	21	16	20	11	17	11	12	13	20	15	18	58	126	35	82
27	19	28	13	17	9	15	13	18	21	42	20	23	44	92	45	87
28	X	X	X	X	X	X	X	X	15	40	X	X	51	102	X	X
29	53	76	X	X	16	45	X	X	24	58	10	12	57	114	22	50
30	X	X	X	X	X	X	X	X	19	34	30	40	36	45	33	77

X = no observations • = yellow line a = index computed from low weight data

SOLAR FLARES

SEPTEMBER 1962

OBSERVATORY	DATE SEPT 1962	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME U T	MEAS AREA Sq Deg	CORR AREA Sq Deg	MAX WIDTH Ha	MAX INT	PROVISIONAL IONOSPHERIC EFFECT
LOCKHEED	01	0119	0134	0125	S05	E14			1-	1	0125	.20	.20		20	
	01	0205	0210	NO FLARE	PATROL											
	01	0220	0240	NO FLARE	PATROL											
	01	0250	0315	NO FLARE	PATROL											
	01	0330	0335	NO FLARE	PATROL											
	01	0400	0525	NO FLARE	PATROL											
	01	0530	0555	NO FLARE	PATROL											
WENDEL	01	0638 E	0702 D		N09	E20	6542	24 D	1				3.00			
WENDEL	01	0818	0844 D	0824	N09	E19	6542	26 D	1+				5.00			
CAPRI S	01	0820 E	0837		N09	E22	6542	17 D	1	3	0830	2.00	2.20			
WENDEL	01	0917 E	0926 D		S07	E11			1-							
WENDEL	01	1035 E	1044 D		S07	E09			1-							
WENDEL	01	1055 E	1121 D		N09	E19			1-							
WENDEL	01	1058 E	1118 D		N08	E16			1-							
CAPRI S	01	1150 E	1210 D		N09	E22	6542	20 D	1	3	1202	1.90	2.20			
WENDEL	01	1301 E	1313 D		S07	E10			1-							
WENDEL	01	1322	1402		S07	E10	6538	40	1				4.00			
CAPRI S	01	1341 E	1400		S05	E03	6538	19 D	1	3	1351	2.10	2.20			
MCMATH	01	1353 E	1415 D		S07	E09	6538	22 D	1	3	1354	2.30	2.40			
MCMATH	01	1358	1415 D	1400	N09	E16	6542		1-	3	1400	.30	.30			
MCMATH	01	1558	1608	1559	S07	E09	6538		1-	2	1559	.20	.20			
LOCKHEED	01	1614	1623	1618	N08	E12			1-	2	1618	.40	.40		10	
WENDEL	01	1614	1636		N09	E14	6542	22	1				4.00			
MCMATH	01	1615	1628	1618	N09	E16	6542		1-	2	1618	.20	.20			
MCMATH	01	1702	1710	1703	S08	E08	6538		1-	2	1703	.20	.20			
WENDEL	01	1702 E	1721 D		S07	E08			1-							
LOCKHEED	01	1732	1754	1737	N09	E14			1-	2	1737	.50	.50		10	
WENDEL	01	1734 E	1746 D		N09	E13			1-							
MCMATH	01	2040	2045	2043	N09	E09	6536		1-	2	2043	.30	.30			
LOCKHEED	01	2040	2048	2043	N09	E09			1-	2	2043	.20	.20		20	
LOCKHEED	01	2142	2157	2146	N09	E11			1-	2	2146	.90	.90		10	
IKOMASAN	02	0143	0202		S07	E04	6538	19	1		0143	.62			110	
	02	0235	0600	NO FLARE	PATROL											
WENDEL	02	0651 E	0705 D		N09	E02			1-							
MEUDON	02	0718 E			S07	W02	6538		1							
WENDEL	02	0719	0746 D	0728	S07	W01	6538	27 D	2				10.00			
CAPRI S	02	0721 E	0741 D		S05	E02	6538	20 D	1+	3	0728	4.00	4.00			
WENDEL	02	0834 E	0851 D		N09	E02			1-							
WENDEL	02	1242	1313	1252	S06	W05	6538	31	1+				6.00			
MCMATH	02	1242	1319	1246	S07	W04	6538		1-	3	1246	1.60	1.70			
WENDEL	02	1435	1518		S06	W06	6538	43	1+				5.00			
MCMATH	02	1439	1515	1443	S07	W05	6538		1-	2	1443	1.50	1.60			
CAPRI S	02	1440	1500 D		S05	W04			1-	3	1450	1.40	1.40			
WENDEL	02	1500 E	1508 D		N09	W01			1-							
MCMATH	02	1551	1600	1554	N09	W03	6542		1-	2	1554	.20	.20			
WENDEL	02	1552 E	1603 D		N09	W02			1-							
MCMATH	02	1619	1730	1624	S08	W07	6538	71	1	2	1624	2.00	2.10			
WENDEL	02	1620	1656 D		S07	W05	6538	36 D	1+				7.00			
LOCKHEED	02	1622	1712	1636	S05	W06			1-	2	1636	1.40	1.40		20	
MCMATH	02	1647	1658	1652	N09	W03	6542		1-	2	1652	.30	.30			

SOLAR FLARES

SEPTEMBER 1962

OBSERVATORY	DATE SEPT 1962	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST	McMATH PLAGE REGION	DURATION — MINUTES	IM. PORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS. AREA Sq. Deg	CORR. AREA Sq. Deg.	MAX WIDTH Ha	MAX. INT %	PROVISIONAL IONOSPHERIC EFFECT
MCMATH	02	1824	1845	1828	N09	W02	6542		1-	2	1828	.30	.30			
MCMATH	02	1846	1940	1852	S08	W08	6538		1-	2	1852	.40	.40			
LOCKHEED	02	2117	2131	2123	N19	W11			1-	2	2123	.30	.30		10	
	03	0145	0200	NO FLARE	PATROL											
	03	0205	0215	NO FLARE	PATROL											
	03	0235	0300	NO FLARE	PATROL											
	03	0310	0315	NO FLARE	PATROL											
	03	0330	0345	NO FLARE	PATROL											
	03	0350	0600	NO FLARE	PATROL											
ISTANBUL	03	0700 E	0900		S13	E85	6548	120 D	1+							
ARCETRI	03	0800 E	1000 D		S14	E85	6548	120 D	2	3	0850					
WENDEL	03	1022 E	1034 D		S06	W15			1-							
WENDEL	03	1204 E	1216 D		S06	W16			1-							
WENDEL	03	1206 E	1212 D		N10	W13			1-							
WENDEL	03	1234 E	1244 D		S08	W11			1-							
MCMATH	03	1240 E	1245		N08	W12	6542		1-	3	1240	.50	.50			
WENDEL	03	1240 E	1249 D		S06	W18			1-							
MCMATH	03	1250	1305	1254	S14	E88	6548		1-	2	1254	.20	1.50			
MCMATH	03	1258	1312	1259	S06	W18	6538		1-	2	1259	.20	.20			
WENDEL	03	1302 E	1314 D		S06	W18			1-							
SAC PEAK	03	1304 E	1332 D	1318	S14	E85			1-	3		.29			15	
MCMATH	03	1316	1323	1319	S14	E88	6548		1-	2	1319	.10	.50			
MCMATH	03	1348	1402	1350	S06	W19	6538		1-	2	1350	.40	.40			
SAC PEAK	03	1348	1404	1354	S06	W17			1-	3		.29	.29		16	
MCMATH	03	1421	1432	1422	N09	W14	6542		1-	3	1422	.50	.50			
MCMATH	03	1447	1500 D	1448	S14	E85	6548		1-	2	1448	.40	1.50			
MCMATH	03	1513 E	1527 D	1518	S09	W18	6538		1-	2	1518	.20	.30			
SAC PEAK	03	1552	1604	1556	S14	E85			1-	3		.14			16	
MCMATH	03	1553	1600	1555	S14	E85	6548		1-	2	1555	.20	7.00			
SAC PEAK	03	1554	1612	1604	S06	W18			1-	3		.72	.72		16	
MCMATH	03	1557	1615		S06	W20	6538		1-	2	1605	.40	.40			
LOCKHEED	03	1600	1609	1605	S05	W19			1-	2	1605	.30	.30		10	
LOCKHEED	03	1718	1729	1723	S11	E80			1-	2	1723	.20	.60		10	
LOCKHEED	03	1804	1815	1807	N07	W22			1-	2	1807	.10	.10		10	
LOCKHEED	03	1830	1921	1837	N09	W24	6536	51	1	2	1837	4.70	4.70		20	
MCMATH	03	1833 E	1919	1840	N10	W23	6536	46 D	2	2	1840	4.50	5.10			
SAC PEAK	03	1834 E	1918 D	1834	N08	W24	6536	44 D	2			5.49	5.49		18	
HUANCAYO	03	1854 E	1906	1854	N09	W29			1-	2	1854	.80	.90			
HONOLULU	03	1900 E	1930		N11	W22	6536	30 D	1	1	1900	4.12	4.12			
MCMATH	03	1937	1953	1940	S08	W21	6538		1-	2	1940	.50	.60			
MCMATH	03	2127 E	2134 D	2128	S06	W24	6538		1-	2	2128	.20	.30			
LOCKHEED	03	2239	2320	2245	S08	W22			1-	2	2245	.20	.20		20	
SAC PEAK	03	2239 E	2344 D	2314	S07	W22			1-	1		1.16	1.18		16	
SAC PEAK	03	2239 E	2344 D	2248	S07	W22			1-							
LOCKHEED	03	2352	0125 D	0011	S05	W20			1-	2	0011	1.60	1.60		20	
LOCKHEED	03	2352	0125 D	0104	S05	W20			1-							
HONOLULU	03	2353	0047 D	0023	S06	W24	6538	54 D	1	3	0023	3.30	3.40			
	04	0125	0255	NO FLARE	PATROL											
	04	0305	0325	NO FLARE	PATROL											

SOLAR FLARES

SEPTEMBER 1962

OBSERVATORY	DATE SEPT 1962	OBSERVED UNIVERSAL TIME START	END	MAX PHASE	LOCATION APPROX LAT.	MER DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME U T	MEAS. AREA Sq Deg.	CORR. AREA Sq Deg.	MAX WIDTH Ha	MAX INT %	PROVISIONAL IONOSPHERIC EFFECT
	04	0345	0350	NO FLARE	PATROL											
	04	0405	0600	NO FLARE	PATROL											
CAPRI S	04	0600 E	0610 D		S05	W25			1-	3	0600	1.30	1.50			
ISTANBUL	04	0722	0730		S06	W28	6538	8	1							
WENDEL	04	0825 E	0902	0830	S06	W27	6538	37 D	1+				6.00			
CAPRI S	04	0826	0846 D		S05	W26			1-	3	0834	1.70	1.90			
ARCETRI	04	0827 E	0845 D		S06	W30	6538	18 D	2	2	0828					
WENDEL	04	1102	1147 D		S07	W27	6538	45 D	1				4.00			
WENDEL	04	1122	1139		N06	E53	6546	17	1				3.00			
WENDEL	04	1158	1232		S06	W29	6538	34	1+				6.00			
WENDEL	04	1238	1303		N09	W21	6542	25	1				4.00			
WENDEL	04	1240 E	1251 D		N09	W26			1-							
WENDEL	04	1316 E	1327 D		N08	E57			1-							
WENDEL	04	1344 E	1408 D		N09	W23	6542	24 D	1				3.00			
LOCKHEED	04	1711	1724	1715	N11	E34			1-	1	1715	.90	1.00		20	
MCMATH	04	2127 E	2203 D	2136	N09	W30	6542		1-	2	2136	1.30	1.50			
MCMATH	04	2136	2142 D		N05	E43	6546		1-	2	2142	.50	.70			
	05	0145	0600	NO FLARE	PATROL											
	05	0610	0615	NO FLARE	PATROL											
	05	0620	0645	NO FLARE	PATROL											
	05	0655	0715	NO FLARE	PATROL											
	05	1045	1110	NO FLARE	PATROL											
	05	1140	1200	NO FLARE	PATROL											
LOCKHEED	05	1527	1545	1532	S07	W34			1-	2	1532	.30	.40		20	
MCMATH	05	1529	1535	1532	S08	W45	6538		1-	1	1532	.30	.40			
LOCKHEED	05	1607	1625	1612	N08	E26			1-	2	1612	.30	.30		20	
MCMATH	05	1651 E	1733	1710	N07	E28	6546		1-	2	1710	.70	.80			
HUANCAYO	05	1709	1714	1712	N10	E26			1-	2	1713	.60	.70			
MCMATH	05	2010 E	2015	2011	S15	E49	6548		1-	1	2011	.20	.30			
HONOLULU	05	2012	2024 D	2020	S06	W50			1-	2	2020	1.13	1.47			
LOCKHEED	05	2014	2028	2017	S07	W48			1-	2	2017	.30	.40		10	
MCMATH	05	2214 E	2219		N07	E25	6546		1-	1	2215	.30	.40			
LOCKHEED	06	0026	0045	0030	N07	E22			1-	2	0030	.40	.40		10	
	06	0320	0500	NO FLARE	PATROL											
WENDEL	06	1355 E	1412 D		N09	E16	6546	17 D	1				3.00			
MCMATH	06	1400	1440	1410	N08	E16	6546		1-	2	1410	.30	.30			
MCMATH	06	1525	1552	1539	N08	E16	6546		1-	2	1539	.30	.30			
WENDEL	06	1537 E	1548 D		N10	E16			1-							
LOCKHEED	06	1605	1623	1608	N08	E10			1-	2	1608	.20	.20		10	
LOCKHEED	06	1706	1724	1712	N07	W49			1-	2	1712	.80	.90		20	
MCMATH	06	1707	1720	1712	N09	W52	6542		1-	2	1712	.80	1.30			
SAC PEAK	06	1707	1723	1714	N08	W51	6542	16	1	2		1.71	2.19		16	
HUANCAYO	06	1709	1718	1712	N03	W48			1-	2	1712	1.00	1.40	2.00		
LOCKHEED	06	1846	1853	1848	N27	E35			1-	2	1848	.20	.20		10	
LOCKHEED	06	2050	2115	2102	N08	E13			1-	1	2102	.90	.90		20	
MCMATH	06	2051	2135	2055	N07	E14	6546		1-	2	2055	.40	.40			
LOCKHEED	07	0035	0053	0039	N07	E11			1-	2	0039	.20	.20		20	
	07	0145	0340	NO FLARE	PATROL											

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CAPRI S	07	0950	1004		S07	E35			1-	3	0956	1.30	1.90			
SAC PEAK	07	1507	1730 U	1538	S15	E24	6548	143 U	2	3		8.77	9.34		22	
CAPRI S	07	1508 E	1600 D		S13	E24	6548	52 D	1	3	1527	1.80	2.20			
MCMATH	07	1508	1730	1530	S15	E24	6548	142	1+	3	1530	3.00	3.50			
HUANCAYO	07	1515	1556	1526	S12	E27			1-	2	1521	1.70	1.90	2.40		
MCMATH	07	1742	1807	1749	S14	E22	6548		1-	2	1749	.80	.90			
SAC PEAK	07	2021 E	2030	2021 U	N12	W70			1-	2		.58	1.03		15	
MCMATH	07	2021	2035	2025	N13	W70	6536		1-	1	2025	.20	.60			
MCMATH	07	2152	2215 D	2156	N07	E02	6546		1-	2	2156	1.50	1.50			
SAC PEAK	07	2152	2223	2157	N08	E02	6546	31	1	2		3.01	3.01		19	
LOCKHEED	07	2153	2222	2157	N07	E03			1-	1	2157	1.30	1.30		20	
HONOLULU	07	2154	2208	2200	N08	W01			1-	3	2200	1.03	1.03			
SAC PEAK	07	2231	2244	2237	N09	W75			1-	2		.29	.62		16	
LOCKHEED	07	2231	2248	2235	N12	W67			1-	1	2235	.30	.50		20	
SAC PEAK	07	2304	2317	2309	S09	E27			1-	2		.43	.45		16	
	08	0150	0315	NO FLARE	PATROL											
	08	0325	0355	NO FLARE	PATROL											
	08	0400	0425	NO FLARE	PATROL											
	08	0635	0645	NO FLARE	PATROL											
MCMATH	08	1257	1305	1259	S13	E11	6548		1-	3	1259	.50	.60			
SAC PEAK	08	1408	1415	1411	S16	E10			1-	3		.33	.35		16	
SAC PEAK	08	1432	1445	1435	N09	W14			1-	3		.19	.17		17	
	09	0220	0240	NO FLARE	PATROL											
	09	0315	0320	NO FLARE	PATROL											
	09	0400	0410	NO FLARE	PATROL											
	09	0420	0430	NO FLARE	PATROL											
	09	0435	0445	NO FLARE	PATROL											
	09	0450	0605	NO FLARE	PATROL											
WENDEL	09	1453	1554 D		N24	E69	6551	61 D	1				4.00			
SAC PEAK	09	1456	1542	1518	N24	E20			1-	3		.58	1.03		17	
SAC PEAK	09	1501	1506	1503	N07	W23			1-	3		.12	.10		15	
HUANCAYO	09	1505 E	1546 D	1505	N16	E55			1-	2						
SAC PEAK	09	1913	1922	1914	N04	W23			1-	3		1.13	1.16		17	
SAC PEAK	09	2115	2120	2117	N04	W25			1-	3		.17	.17		17	
	10	0135	0145	NO FLARE	PATROL											
	10	0220	0230	NO FLARE	PATROL											
LOCKHEED	10	2312	2406	2321	N10	W38			1-	2	2321	1.10	1.20		20	
SAC PEAK	10	2313	2355	2316	N09	W39			1-	3		1.44	1.59		16	
SAC PEAK	10	2313	2355	2319	N09	W39			1-							
IKOMASAN	10	2313 E	2358 D	2316	N07	W41	6546	45 D	1		2316	1.13		.86	120	
HONOLULU	10	2314	2350 D	2324	N10	W38			1-	2	2324	1.13	1.25			
HONOLULU	11	0056	0130 D		N19	E90	6553	34 D	1	1	0120	.72	2.09			
	11	0200	0305	NO FLARE	PATROL											
	11	0350	0355	NO FLARE	PATROL											
CAPRI S	11	0603 E	0633 D		N17	E80	6553	30 D	1	3	0628	1.00	3.50			
ARCETRI	11	0814 E	0845 D		N29	E72	6553	31 D	1	3	0845					
SALTSJOBADE	11	0912 E	1000 D	0945	N22	E70	6553	48 D	1	2		1.30	3.60			

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SAC PEAK	11	1652 E	1701 D	1659 U	N23	E43			1-	3		.43	.50		16	
	11	1730	1755	NO FLARE	PATROL											
	12	0200	0605	NO FLARE	PATROL											
MCMATH	12	1206 E	1250		N21	E60	6553		1-	2	1212	.60	1.20			
MCMATH	12	1335	1400		N21	E60	6553		1-	2	1340	.70	1.50			
MCMATH	12	1435	1450		N21	E60	6553		1-	2	1440	.20	.40			
SAC PEAK	12	1455 E	1534	1459	S18	W42			1-	2		.58	.70		17	
SAC PEAK	12	1522	1539	1530	N21	E59	6553	17	1	2		1.16	1.65		16	
MCMATH	12	1522	1540	1528	N21	E58	6553		1-	2	1528	.70	1.50			
SAC PEAK	12	1635 E	1645	1636	N21	E57			1-	2		.72	1.03		16	
MCMATH	12	1814	1821	1817	N21	E57	6553		1-	2	1817	.10	.20			
MCMATH	12	1943	2050		N21	E57	6553		1-	2	1955	.50	1.00			
	13	0150	0210	NO FLARE	PATROL											
	13	0220	0255	NO FLARE	PATROL											
	13	0305	0315	NO FLARE	PATROL											
	13	0325	0340	NO FLARE	PATROL											
	13	0420	0455	NO FLARE	PATROL											
	13	0515	0635	NO FLARE	PATROL											
CAPRI S	13	0919 E	0935		N24	E48	6553	16 D	1+	3	0928	1.40	2.30			
SALTSJOBADE	13	0925 E	0940 D	0930	N22	E55	6553	15 D	1	3		2.50	4.50			
SALTSJOBADE	13	0952 E	1030 D	0955	S17	W52			1-	3		1.00	1.80			
CAPRI S	13	0956 E	1010 D		S15	W53			1-	3	1008	1.00	1.80			
CAPRI S	13	1014 E	1041 D		S15	W53			1-	3	1019	1.00	1.80			
CAPRI S	13	1054	1113 D		N21	E49			1-	3	1100	.70	1.20			
SALTSJOBADE	13	1100 E	1111 D	1105	N22	E55	6553	11 D	1	2		2.00	3.60			
MCMATH	13	1213	1235 D		N23	E52	6553		1-	3	1220	.20	.40			
MCMATH	13	1236	1315	1245	N22	E50	6553		1-	3	1245	1.00	1.60			
MCMATH	13	1356	1425	1358	N22	E49	6553		1-	2	1358	.90	1.40			
MCMATH	13	1440	1447	1442	N23	E49	6553		1-	1	1442	.20	.30			
MCMATH	13	1520	1530	1522	N22	E49	6553		1-	2	1522	.30	.40			
MCMATH	13	1641	1656 D	1643	N22	E48	6553		1-	2	1643	.20	.30			
HUANCAYO	13	1645	1650	1648	N30	E40			1-	2	1649	.20	.30	1.80		
LOCKHEED	13	1705 E	1736	1707	S09	W14			1-	2	1707	1.20	1.20		20	
LOCKHEED	13	1729	1739	1733	N22	E43			1-	2	1733	.30	.40		10	
MCMATH	13	1758	1810	1806	N22	E47	6553		1-	2	1806	.20	.30			
SAC PEAK	13	2107 E	2126 U	2110 D	N23	E44			1-	2		.41	.47		16	
	14	0145	0155	NO FLARE	PATROL											
	14	0205	0605	NO FLARE	PATROL											
WENDEL	14	0643 E	0651 D		N24	E37			1-							
WENDEL	14	0951 E	0959 D		N23	E36			1-							
WENDEL	14	1105 E	1109 D		N23	E35			1-							
MCMATH	14	1344	1350	1345	N22	E36	6553		1-	3	1345	.10	.10			
MCMATH	14	1356 E	1447	1414	N23	E33	6553		1-	3	1414	.20	.20			
WENDEL	14	1504 E	1555 D		N24	E31	6553	51 D	1				3.00			
MCMATH	14	1507	1515 D	1509	N23	E32	6553		1-	2	1509	.20	.20			
MCMATH	14	1535	1555	1538	N23	E32	6553		1-	2	1538	.30	.30			
SAC PEAK	14	1536	1548 D	1538	N23	E33			1-	1		.58	.62		16	
LOCKHEED	14	1721	1739	1728	N22	E32			1-	2	1728	.50	.50		10	

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MCMATH	14	1726	1735	1729	N22	E33	6553		1-	1	1729	.20	.20			
SAC PEAK	14	1727	1730 D	1728	N22	E35			1-	1		.43	.47		16	
MCMATH	14	1858	1912	1858	N22	E33	6553		1-	2	1858	.20	.20			
MCMATH	14	2006	2015	2010	N21	E32	6553		1-	2	2010	.10	.10			
MCMATH	14	2056	2119	2108	N23	E29	6553		1-	2	2108	.40	.40			
	15	0150	0445	NO FLARE	PATROL											
	15	0450	0455	NO FLARE	PATROL											
	15	0530	0600	NO FLARE	PATROL											
CAPRI S	15	1248 E	1313 D		N21	E19			1-	3	1300	1.60	1.80			
WENDEL	15	1252 E	1315 D		N22	E21	6553	23 D	1				4.00			
MCMATH	15	1318 E	1355		N22	E22	6553		1-	3	1318	1.50	1.50			
WENDEL	15	1413 E	1420 D		S06	W36			1-							
WENDEL	15	1430 E	1437 D		N22	E20	6553	7 D	1				4.00			
CAPRI S	15	1431 E	1444		N21	E19			1-	3	1438	1.00	1.10			
MCMATH	15	1432 E	1528 D	1434	N21	E20	6553		1-	2	1434	.70	.80			
MCMATH	15	1432 E	1528 D	1459	N21	E20			1-							
SAC PEAK	15	1433	1450	1434	N21	E20			1-	2		.87	.87		16	
WENDEL	15	1455 E	1501 D		N22	E22			1-							
MCMATH	15	1553	1635	1603	N21	E19	6553		1-	2	1603	.30	.30			
SAC PEAK	15	1558	1623 D	1600	N21	E20			1-	1		.66	.66		16	
LOCKHEED	15	2225	2254	2239	N23	E16			1-	2	2239	1.20	1.20		20	
SAC PEAK	15	2234	2254	2241	N21	E15			1-	1		1.16	1.13		16	
	16	0155	0305	NO FLARE	PATROL											
	16	0340	0500	NO FLARE	PATROL											
KODAIKNL	16	0636	0642	0637	N23	E23			1-	2	0638			1.32		
ISTANBUL	16	0715 E	0815 D		N22	E12	6553	60 D	?							
ARCETRI	16	0952 E	1002 D		N24	E07	6553	10 D	1	2	1002					
KODAIKNL	16	1015 E	1017		N23	E23			1-	2	1015			1.40	114	
	16	1140	1205	NO FLARE	PATROL											
SAC PEAK	16	1438	1442	1440	N22	E08			1-	3		.21	.21		16	
SAC PEAK	16	1458	1508	1501	N22	E08			1-	3		.29	.29		16	
MCMATH	16	1550	1620	1554	N22	E08	6553		1-	3	1554	.40	.40			
LOCKHEED	16	1916	1937	1922	N21	E03			1-	2	1922	.20	.20		10	
MCMATH	16	1919	1930	1921	N21	E04	6553		1-	2	1921	.20	.20			
LOCKHEED	16	2318	2345	2323	N13	E18			1-	2	2323	.20	.20		10	
	17	0115	0150	NO FLARE	PATROL											
	17	0300	0825	NO FLARE	PATROL											
	17	0830	1110	NO FLARE	PATROL											
	17	1140	1205	NO FLARE	PATROL											
	17	1240	1250	NO FLARE	PATROL											
	17	1300	1325	NO FLARE	PATROL											
	17	1435	1440	NO FLARE	PATROL											
	17	1655	1710	NO FLARE	PATROL											
	18	0125	0145	NO FLARE	PATROL											
ISTANBUL	18	0720 E	0745		N22	W16	6553	25 D	1							
ISTANBUL	18	0800	0810		N22	W16	6553	10	1							
MCMATH	18	1248	1325 D	1251	N21	W18	6553		1-	3	1251	1.00	1.10			

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LOCKHEED	18	1824	1850	1828	N21	W19			1-	2	1828	.30	.30		10	
	19	0130	0240	NO FLARE PATROL												
	19	0250	0315	NO FLARE PATROL												
	19	0325	0345	NO FLARE PATROL												
	19	0350	0355	NO FLARE PATROL												
	19	0450	0555	NO FLARE PATROL												
LOCKHEED	19	1900	1935	1915	N24	W36			1-	2	1915	.40	.40		10	
SAC PEAK	19	1907 E	1911 D	1907 U	N24	W36			1-	1		.78	.87		16	
MCMATH	19	1907	1927 D		N25	W37	6553		1-	2	1913	.60	.80			
LOCKHEED	19	2135	2200	2145	N12	E78			1-	2	2145	.20	.50		10	
LOCKHEED	19	2225	2245	2231	N12	E78			1-	2	2231	.20	.50		10	
IKOMASAN	20	0510 E	0530 D	0517	N21	W38	6553	20 D	1		0517	1.13				
KODAIKNL	20	0520 E	0530 D		N23	W44			1-	2	0520			1.40		
	20	0850	0945	NO FLARE PATROL												
	20	1000	1045	NO FLARE PATROL												
	20	1050	1215	NO FLARE PATROL												
SAC PEAK	20	1506	1510	1507	N22	W47			1-	3		.14	.17		16	
LOCKHEED	20	1809	1825	1811	N22	W48			1-	2	1811	.60	.70		10	
SAC PEAK	20	1809	1829	1812	N23	W47			1-	3		.78	.97		16	
	21	0030	0040	NO FLARE PATROL												
	21	0050	0135	NO FLARE PATROL												
	21	0155	0255	NO FLARE PATROL												
	21	0335	0350	NO FLARE PATROL												
	21	0430	0555	NO FLARE PATROL												
	21	0605	0650	NO FLARE PATROL												
	21	0715	0725	NO FLARE PATROL												
	21	0730	0800	NO FLARE PATROL												
	21	0840	0905	NO FLARE PATROL												
	21	1010	1020	NO FLARE PATROL												
	21	1025	1040	NO FLARE PATROL												
	21	1045	1145	NO FLARE PATROL												
MCMATH	21	1314	1321	1314	N22	W65	6553		1-	2	1314	.70	1.50			
SAC PEAK	21	1611	1617	1612	N07	E70			1-	2		.19	.33		15	
MCMATH	21	1838	1846	1840	N07	E69	6560		1-	2	1840	.20	.50			
	22	0045	0050	NO FLARE PATROL												
	22	0135	0150	NO FLARE PATROL												
	22	0530	0820	NO FLARE PATROL												
	22	0825	0840	NO FLARE PATROL												
	22	0845	0915	NO FLARE PATROL												
	22	1005	1350	NO FLARE PATROL												
	22	1405	1540	NO FLARE PATROL												
LOCKHEED	22	1833	1853	1842	N06	W23			1-	2	1842	.10	.10		10	
LOCKHEED	22	2055	2117	2101	N24	W81	6553	12	1	2	2101	1.00	2.90		10	
HONOLULU	22	2058	2114 D	2104	N14	W90	6552	16 D	1	2	2104	1.13	3.29			
LOCKHEED	22	2312	2330	2319	N07	E90			1-	2	2319	.20	1.00		20	
	23	0610	0625	NO FLARE PATROL												

SOLAR FLARES

SEPTEMBER 1962

OBSERVATORY	DATE SEPT 1962	OBSERVED UNIVERSAL TIME START	OBSERVED UNIVERSAL TIME END	OBSERVED UNIVERSAL TIME MAX PHASE	LOCATION APPROX LAT	LOCATION APPROX MER DIST.	LOCATION McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME U T	MEASUREMENTS MEAS. AREA Sq Deg.	MEASUREMENTS CORR. AREA Sq Deg	MEASUREMENTS MAX. WIDTH Ha	MEASUREMENTS MAX INT	PROVISIONAL IONOSPHERIC EFFECT
	23	0750	0820	NO FLARE	PATROL											
	23	1005	1220	NO FLARE	PATROL											
LOCKHEED	23	1620	1645	1635	N23	W90			1-	2	1635	.20	1.00		10	
LOCKHEED	23	1940	2015	1950	N09	E41			1-	2	1950	.30	.30		10	
LOCKHEED	23	2035	2120	2050	N09	E41			1-	2	2050	.20	.20		10	
	24	0125	0135	NO FLARE	PATROL											
	24	0415	0855	NO FLARE	PATROL											
	24	0900	0925	NO FLARE	PATROL											
	24	1005	1110	NO FLARE	PATROL											
	24	1130	1320	NO FLARE	PATROL											
MCMATH	24	1522	1545	1532	N10	E61	6562		1-	3	1532	.60	1.20			
LOCKHEED	24	1724	1755	1728	N17	W08			1-	2	1728	.30	.30		10	
LOCKHEED	24	1843	1903	1850	N17	W08			1-	2	1850	.20	.20		10	
LOCKHEED	24	1934	2030	1940	N17	W08			1-	2	1940	.20	.20		10	
LOCKHEED	24	1934	2030	2012	N17	W08			1-							
LOCKHEED	24	2230	2325	2240	N17	W08			1-	2	2240	.30	.30		10	
LOCKHEED	24	2230	2325	2305	N17	W08			1-							
LOCKHEED	24	2329	2345	2332	N20	W42			1-	2	2332	.30	.30		10	
	25	0500	0620	NO FLARE	PATROL											
WENDEL	25	0618 E	0725		N13	E48	6562	67 D	2				12.00			
CAPRI S	25	0620 E	0720 D		N10	E60	6562	60 D	2	3	0640	5.00	8.50			
CAPRI S	25	0712 E	0741 D		N14	W14	6559	29 D	1+	3	0720	2.10	2.10			
WENDEL	25	0713 E	0748		N15	W14	6559	35 D	1+				6.00			
WENDEL	25	1610 E	1624 D		N16	W20			1-							
	25	1645	1725	NO FLARE	PATROL											
LOCKHEED	25	1800	1905	1810	N16	W25			1-	2	1810	.20	.20		10	
LOCKHEED	25	1800	1905	1835	N16	W25			1-							
LOCKHEED	25	2114	2132	2120	N09	E11			1-	2	2120	.20	.20		10	
LOCKHEED	25	2207	2230	2213	N21	W57			1-	2	2213	.20	.30		10	
SAC PEAK	25	2208	2242	2214	N19	W56			1-	2		.43	.60		16	
LOCKHEED	25	2236	2250	2241	N16	W25			1-	2	2241	.20	.20		10	
	26	0020	0045	NO FLARE	PATROL											
	26	0220	0400	NO FLARE	PATROL											
	26	0520	0620	NO FLARE	PATROL											
	26	1645	1835	NO FLARE	PATROL											
	26	2015	2025	NO FLARE	PATROL											
	26	2225	2240	NO FLARE	PATROL											
	27	0055	0120	NO FLARE	PATROL											
	27	0245	0320	NO FLARE	PATROL											
	27	0340	0400	NO FLARE	PATROL											
	27	0530	0625	NO FLARE	PATROL											
WENDEL	27	0711 E	0717 D		N12	E29			1-							
WENDEL	27	1508 E	1523 D		N09	W10			1-							
	27	1735	1755	NO FLARE	PATROL											
	27	2045	2110	NO FLARE	PATROL											
	27	2115	2135	NO FLARE	PATROL											
	28	0210	0345	NO FLARE	PATROL											

SOLAR FLARES

SEPTEMBER 1962

OBSERVATORY	DATE SEPT 1962	OBSERVED UNIVERSAL TIME START	END	MAX PHASE	LOCATION APPROX. LAT.	MER. DIST.	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT %	PROVISIONAL IONOSPHERIC EFFECT
	28	0530	0600	NO FLARE	PATROL											
WENDEL	28	1510 E	1522 D		N15	W58			1-							
	28	1720	1725	NO FLARE	PATROL											
	28	1735	1740	NO FLARE	PATROL											
	28	1810	1815	NO FLARE	PATROL											
	28	1830	1915	NO FLARE	PATROL											
	28	2025	2045	NO FLARE	PATROL											
	28	2100	2105	NO FLARE	PATROL											
	28	2115	2150	NO FLARE	PATROL											
	29	0025	0140	NO FLARE	PATROL											
	29	0550	0600	NO FLARE	PATROL											
	29	0735	0740	NO FLARE	PATROL											
	29	1035	1405	NO FLARE	PATROL											
LOCKHEED	29	1620	1638	1626	N09	E68			1-	2	1626	.60	1.10		10	
SAC PEAK	29	1621	1634	1628	N09	E71			1-	3		.43	.78		17	
MCMATH	29	1622	1633	1627	N09	E70	6566		1-	2	1627	.20	.60			
LOCKHEED	29	1647	1730	1700	N09	E68			1-	2	1700	.50	.90		10	
LOCKHEED	29	1647	1730	1715	N09	E68			1-							
LOCKHEED	29	1750	1845	1803	N09	E68			1-	2	1803	.50	.90		10	
LOCKHEED	29	1750	1845	1820	N09	E68			1-							
SAC PEAK	29	1810	1830	1824	N10	E70			1-	3		.29	.52		16	
MCMATH	29	1818	1825	1821	N09	E69	6566		1-	2	1821	.20	.60			
LOCKHEED	29	1753	1810	1757	N09	W45			1-	2	1757	.60	.70		20	
SAC PEAK	29	1753	1825	1804	N10	W42			1-	3		.87	.99		19	
MCMATH	29	1754	1808	1756	N08	W45	6560		1-	2	1756	.40	.60			
LOCKHEED	29	1915	2100	1945	N09	E68			1-	2	1945	.80	1.40		10	
LOCKHEED	29	1915	2100	2005	N09	E68			1-							
SAC PEAK	29	1956	2022	2015	N11	E78			1-	3		.29	.66		16	
MCMATH	29	2006 E	2014 D		N09	E68	6566		1-	2	2010	.30	.80			
MCMATH	29	2039 E	2053	2041	N09	E68	6566		1-	2	2041	.30	.80			
LOCKHEED	29	2238	2335	2248	N09	E67			1-	2	2248	.50	.90		10	
LOCKHEED	29	2238	2335	2320	N09	E67			1-							
LOCKHEED	30	0014	0055	0018	N10	E68	6566	41	1	2	0018	1.20	.21		10	
IKOMASAN	30	0016	0028 D		N08	E65	6566	12 D	1		0016	1.03		1.42	100	
	30	0105	0440	NO FLARE	PATROL											
WENDEL	30	0616 E	0649		N10	E59	6566	33 D	1				4.00			
WENDEL	30	1032 E	1051 D		S08	E32		19 D	1				3.00			
WENDEL	30	1122	1143		S08	E30		21	1				3.00			
CAPRI S	30	1124	1135		S15	E25			1-	3	1128	1.00	1.20			
WENDEL	30	1208	1224		N10	E56	6566	16	1				3.00			
MCMATH	30	1208 E	1228	1213	N10	E59	6566		1-	3	1213	.50	1.00			
CAPRI S	30	1209	1225 D		N05	E60			1-	3	1215	.80	1.40			
SAC PEAK	30	1543	1551	1547	N08	E62			1-	3		.14	.21		15	
SAC PEAK	30	1553	1620	1600	N10	E58	6566	27	1	3		.72	1.01		16	
MCMATH	30	1555	1608		N10	E57	6566		1-	1	1558	.20	.40			
LOCKHEED	30	1555 E	1615	1555 U	N10	E55			1-	2	1555	.80	1.10		10	
LOCKHEED	30	1745	1920	1800	N10	E55	6566	95	1	2	1800	1.90	2.60		10	
LOCKHEED	30	1745	1920	1830	N10	E55			1							
MCMATH	30	1800	1850 D	1803	N10	E57	6566		1-	2	1803	.20	.40			

SOLAR FLARES

SEPTEMBER 1962

OBSERVATORY	DATE SEPT 1962	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME U T	MEAS AREA Sq Deg.	CORR AREA Sq Deg	MAX WIDTH Hα	MAX INT °₀	PROVISIONAL IONOSPHERIC EFFECT
MCMATH	30	1800	1850 D	1822	N10	E57			1-							
LOCKHEED	30	1808	1840	1815	S13	E24			1-	2	1815	.20	.20		10	
SAC PEAK	30	1810	1824	1816	S13	E26			1-	3		.21	.23		16	
MCMATH	30	1812	1825	1815	S12	E25	6564		1-	2	1815	.10	.10			
SAC PEAK	30	1815	1829	1820	N08	W60			1-	3		1.01	1.49		17	
LOCKHEED	30	1815	1832	1821	N06	W59			1-	2	1821	.50	.70		20	
MCMATH	30	1818	1827	1821	N07	W60	6560		1-	2	1821	.40	.80			
LOCKHEED	30	1924	2037	1930	N10	E54			1-	2	1930	1.20	1.60		20	
LOCKHEED	30	1924	2037	2010	N10	E54			1-							
MCMATH	30	1930 E	1937 D		N10	E56	6566		1-	1	1932	.40	.80			
HUANCAYO	30	1933 E	2001 D	1939	N11	E60			1-	2	1935	.50	.90			
SAC PEAK	30	2002	2019	2011	N10	E57			1-	3		.50	.68		16	
LOCKHEED	30	2035	2052	2040	S13	E24			1-	2	2040	.30	.30		10	
LOCKHEED	30	2215	2245	2229	N10	E54			1-	2	2229	.30	.40		10	
LOCKHEED	30	2247	2300	2254	N10	E54			1-	2	2254	.20	.30		10	
IKOMASAN	30	2255	2312		N08	E53	6566	17	1		2305	1.13			110	
LOCKHEED	30	2310	2316	2314	S10	E22			1-	2	2314	.20	.20		10	

ATHENES	ATHENS, GREECE	HTE-PROVEN	HAUTE-PROVENCE
BAKOU	PIRCULI, USSR	HONOLULU	HAWAII, USA
CAPETOWN	ROYAL OBSERVATORY, CAPE OF GOOD HOPE	IKOMASAN	KYOTO, JAPAN
CAPRI F	CAPRI, ITALY (GERMAN)	KIEV KO	KIEV GAO, USSR
CAPRI S	CAPRI, ITALY (SWEDISH)	KIEV KY	KIEV UNIVERSITY, USSR
CRIMÉE	SIMEIZ, USSR	LOCKHEED	LOS ANGELES, CALIF., USA
HERSTMONCEU	ROYAL GREENWICH OBSERVATORY, HERSTMONCEUX, ENGLAND	MCMATH	MCMATH-HULBERT PONTIAC, MICH., USA
		MOSCOU	MOSCOW-GAISH, USSR
NEW SCHAUIN	FREIBURG, GFR		
NERA	NEDERHORST den BERGH, NETHERLANDS		
NIZMIR	KRASNAYA PAKHRA, USSR		
SAC PEAK	SACRAMENTO PEAK, N.MEX. USA		
SALTSJÖBADEN	STOCKHOLM, SWEDEN		
SCHAUINS	SCHAUINSLAND, GFR		
TACHKENT	TASHKENT, USSR		
WENDEL	WENDELSTEIN, GFR		

ALL VALUES IN THE MAXIMUM INTENSITY COLUMN FOR SAC PEAK ARE ARBITRARY UNITS (0-40) AND FOR LOCKHEED ARE ARBITRARY UNITS (10-40), NOT PERCENT OF CONTINUOUS SPECTRUM.

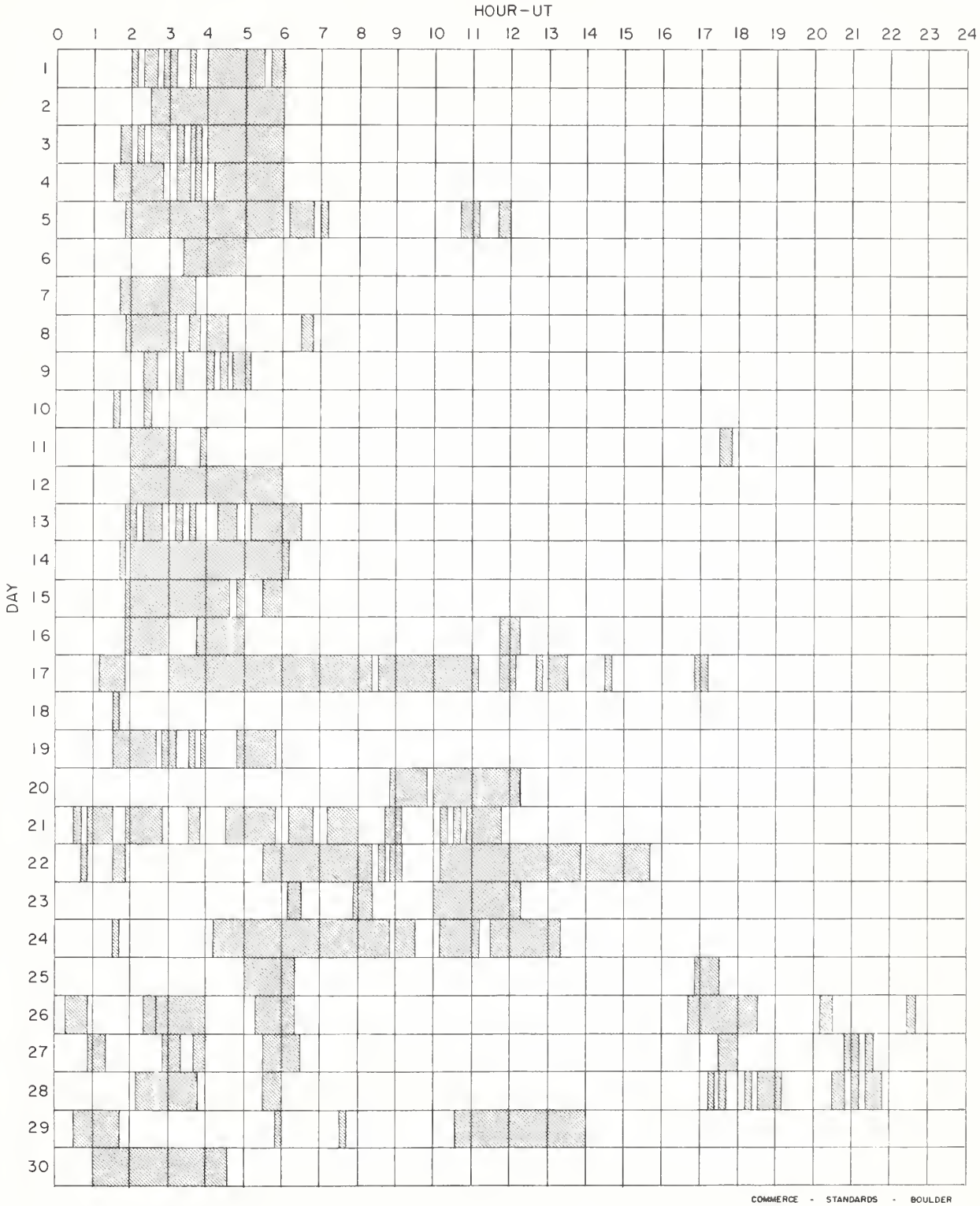
SEE DESCRIPTIVE TEXT PUBLISHED NOVEMBER 1961 FOR DEFINITION OF CORRECTED AREA VALUES LISTED FOR CLIMAX, HAWAII, LOCKHEED AND SACRAMENTO PEAK.

E = LESS THAN D = GREATER THAN U = APPROXIMATE □ = NOT REPORTED.

COMMERCE - STANDARDS - BOULDER

INTERVALS OF NO FLARE PATROL OBSERVATIONS

SEPTEMBER 1962



Stations include:

Arcetri	Honolulu	Kodaikanal	Sacramento Peak
Capri (Swedish)	Ikomasan	Lockheed	Wendelstein
Herstmonceux	Istanbul	McMath-Hulbert	

SOLAR FLARES

JUNE 1962

OBSERVATORY	DATE JUNE 1962	OBSERVED UNIVERSAL TIME START	END	MAX PHASE	LOCATION APPROX LAT.	MER DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME U.T.	MEAS. AREA Sq. Deg.	CORR AREA Sq. Deg.	MAX. WIDTH Ha	MAX INT.	PROVISIONAL IONOSPHERIC EFFECT
ATHENES	01	0552	0622		N12	E67			1-	2		.30	.80			
UCCLE	01	0907 E	0923		S10	W65			1-	3						
UCCLE	01	0930	0940		S05	W66			1-	3						
UCCLE	01	0948	0951		N12	W73			1-	3						
UCCLE	01	1012 E	1016		N12	W76			1-	3						
UCCLE	01	1014 E	1016 D		S10	W66			1-	3						
UCCLE	01	1034 E	1038		S07	W66			1-	3						
UCCLE	01	1125 E	1158		S07	W65			1-	3						
CAPETOWN	01	1203	1238	1213	N16	W85	6426	35	1		1213	.60				
	02	0055	0135	NO FLARE	PATROL											
	02	0145	0150	NO FLARE	PATROL											
CAPETOWN	02	0750	0826	0800	N16	W90	6426	36	1		0800	.50				
CAPETOWN	02	1142	1206	1146	N09	W85	6426	24	1		1146	.60				
	03	0110	0150	NO FLARE	PATROL											
	03	0240	0300	NO FLARE	PATROL											
	03	0445	0515	NO FLARE	PATROL											
	04	0000	0015	NO FLARE	PATROL											
	04	0040	0105	NO FLARE	PATROL											
	04	0115	0150	NO FLARE	PATROL											
UCCLE	04	0913	0929	0919	S06	E88			1-	3	0919					
UCCLE	04	1144	1206 D		N10	E20			1-	2						
UCCLE	04	1436 E	1441		N10	E20			1-	2						
UCCLE	04	1734	1741		S06	E88			1-	3						
	05	0120	0145	NO FLARE	PATROL											
ATHENES	05	0740	0820		S08	E23			1-	1		1.30	1.40			
NEW SCAUIN	05	0748 E	0810 D					22 D	1	2						
SCHAUINS	05	0800 E	0808		S06	E30			1-	2		3.00				
UCCLE	05	0843 E	0912	0848	S10	E88			1-	2	0848					
UCCLE	05	0843 E	0912		S07	E25			1-	2						
UCCLE	05	0852	0945		S10	E75			1-	3						
UCCLE	05	0924	1039	0931	N08	E08	6436	75	1	3	0931					
HTE-PROVEN	05	0930	1100		N08	E05			1-							
UCCLE	05	1008	1038	1011	S11	E75			1-	3	1011					
UCCLE	05	1039	1056		S08	E75			1-	3						
CLIMAX	05	1228	1237	1231	S08	E73			1-			.30	.70			
UCCLE	05	1234	1245		S10	E80			1-	3						
UCCLE	05	1300	1311		S10	E74			1-	3						
UCCLE	05	1315	1343		S10	E74			1-	3						
UCCLE	05	1436	1443		S10	E78			1-	3						
UCCLE	05	1520	1538		S10	E78			1-	3						
UCCLE	05	1616	1630	1625	S08	E74			1-	3						
UCCLE	05	1723	1735		S08	E74			1-	3						
UCCLE	05	1724	1735		S08	E76			1-	3						
UCCLE	05	1739	1757 D		S10	E76			1-	3						
	06	0000	0040	NO FLARE	PATROL											
	06	0055	0415	NO FLARE	PATROL											

SOLAR FLARES

JUNE 1962

OBSERVATORY	DATE JUNE 1962	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. °.	PROVISIONAL IONOSPHERIC EFFECT
	06	0540	0545	NO FLARE	PATROL											
ATHENES	06	0613 E	0638 D		N08	E25			1-	2		1.30	1.60			
UCCLE	06	1250	1258		N09	W11			1-	3						
UCCLE	06	1333	1406		S13	E62			1-	3						
UCCLE	06	1456	1530		N09	W12			1-	3						
UCCLE	07	0831	0928	0854	S08	E50			1-	3						
CLIMAX	07	2307 E	2324 D		S07	E41			1-		2310	1.20	1.30			
	07	2325	0000	NO FLARE	PATROL											
	08	0000	0015	NO FLARE	PATROL											
	08	0025	0055	NO FLARE	PATROL											
ALMA ATA	08	0646	0659 D	0650	N04	E10			1-		0650	.77			55	
UCCLE	08	0825	0846		S10	E35			1-	3						
UCCLE	08	0847	0855		S10	E35			1-	3						
UCCLE	08	0952	1019	1006	S10	E35	6441	27	1	3	1006	2.00	2.60			
TACHKENT	09	0300 E	0600 D	0314	S12	E78	6445	180 D	1	2	0315	.36	1.60	3.40	90	
ATHENES	09	0615 E	0645 D		S14	E69	6445	30 D	1	3		1.00	3.00			
CLIMAX	11	1518	1526	1520	N05	E78			1-			.10	.20			
ABASTUMANI	12	0542 E	0620 D	0552	N07	E69	6453	38 D	1	2		1.26	3.74		55	
NIZMIR	12	0706 E	0834 D	0734	N05	E26	6451	88 D	1			1.75			100	
HTE-PROVEN	12	0700	0830		S09	W25			1-							
ABASTUMANI	12	0708 E	0845 D	0738	S08	W24	6441	97 D	1	2	0748	3.42	3.91	2.30	60	
CRIMEE	12	0709 E	0729 D	0729	S08	W23	6441	20 D	1+	1	0729	7.64				
ATHENES	12	0717	0904		S10	W24			1-	2		.90	1.00			
ATHENES	12	0720	0850		S10	W19			1-	2		1.00	1.20			
UCCLE	12	0847 E	0911 D		S09	W25			1-	3						
UCCLE	12	0851	0902 D		S11	E35			1-	3						
CLIMAX	12	1432	1453	1442	N04	E62			1-			.40	.60			
UCCLE	13	0933	0945		S10	E20			1-	3						
UCCLE	13	0957	1005		S10	E20			1-	3						
UCCLE	13	1422	1441		S14	E17			1-	3						
UCCLE	13	1448	1500	1457	S10	E20			1-	3						
CLIMAX	13	1451	1456	1453	S10	E19			1-			.40	.40			
UCCLE	13	1605	1607 D		S12	E14			1-	3						
CLIMAX	13	1609 E	1620	1610	S13	E16			1-			.80	.80			
	14	0205	0245	NO FLARE	PATROL											
ATHENES	14	0552 E	0608		N09	E38			1-	2		.80	1.00			
ATHENES	14	0608	0618		S09	E09			1-	2		.20	.20			
ATHENES	14	0644 E	0649 D		S11	E06			1-	2		.30	.30			
ATHENES	14	0750 E	0815		N10	E28			1-	3		.50	.50			
UCCLE	14	0825	0948	0832	N09	E28			1-	3	0832					
ATHENES	14	0843	0847		S06	W52			1-	3		.30	.50			
UCCLE	14	1013	1026		S10	E08			1-	3						
UCCLE	14	1023	1044		N09	E28			1-	3						
UCCLE	14	1335	1349		S11	E04			1-	3						

SOLAR FLARES

JUNE 1962

OBSERVATORY	DATE JUNE 1962	OBSERVED UNIVERSAL TIME START	END	MAX PHASE	LOCATION APPROX LAT.	MER DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS COND.	MEASUREMENTS TIME U.T.	MEAS AREA Sq Deg	CORR AREA Sq Deg	MAX WIDTH Ha	MAX INT	PROVISIONAL IONOSPHERIC EFFECT
UCCLE	14	1408	1418		S11	E04	6445	10	1	3						
UCCLE	14	1630	1638		S10	E06			1-	3						
UCCLE	14	1648	1708		S10	E06	6445	20	1	3						
ATHENES	15	0850 E	0908 D		S12	W05			1-	3		1.30	1.40			
UCCLE	15	1134	1139		S15	W10	6445	5	1	3						
UCCLE	15	1353	1356		N08	E13			1-	3						
UCCLE	15	1413	1425		N07	E08			1-	3						
UCCLE	15	1532	1551		S15	E20			1-	3						
UCCLE	15	1631	1641		S13	W15			1-	3						
UCCLE	15	1710 E	1733 D	1724	S13	W15			1-	3						
CLIMAX	15	2244	2319 D	2256	S12	W17			1-			1.60	1.60			
VOROSHILOV	15	2245	2305	2247	S11	W16	6445	20	1	2		1.97			68	
	16	0155	2000	NO FLARE PATROL												
	16	1050	1055	NO FLARE PATROL												
CLIMAX	17	0113 E	0119 D		S05	W90			1-		0117	.40	2.00			
ATHENES	17	0548 E	0602		S11	W33			1-	3		1.20	1.40			
ATHENES	18	0546 E	0557		S12	W49			1-	3		.80	1.20			
ATHENES	18	0635 E	0646		S12	W50			1-	3		.10	.20			
UCCLE	18	0823 E	0838 D	0834	S10	E80			1-	2						
UCCLE	18	0823 E	0841 D	0834	N15	E67	6459	18 D	1	2						
UCCLE	18	0912 E	0918 D		S10	E80			1-	2						
UCCLE	18	0912 E	0918 D		N15	E67			1-	2						
UCCLE	18	0923	0946	0932	S10	E80			1-	3						
UCCLE	18	0923	0951		N15	E67			1-	3						
UCCLE	18	0935	0946		S14	W52			1-	3						
UCCLE	18	0959 E	1017 D		S10	E79			1-	3						
UCCLE	18	0959 E	1048 D	1005	N15	E67			1-	3						
UCCLE	18	1106	1128		N15	E67			1-	3						
UCCLE	18	1206	1218 D		S12	W52			1-	3						
UCCLE	18	1300			N15	E65			1-	3						
UCCLE	18	1346	1356		S14	W53			1-	3						
UCCLE	18	1347	1356		N14	E65			1-	3						
UCCLE	18	1409	1428		S14	W53			1-	3						
UCCLE	18	1411	1435		N14	E66			1-	3						
UCCLE	18	1411	1438		S10	E78			1-	3						
UCCLE	18	1435	1512		S14	W51			1-	3						
UCCLE	18	1441	1448		N14	E65	6459	7	1	3						
UCCLE	18	1519	1610		S14	W53			1-	3						
UCCLE	18	1545	1616		N15	E76			1-	3						
UCCLE	18	1611	1610		N14	E65			1-	3						
UCCLE	18	1725	1731 D		S14	W53			1-	3						
ATHENES	19	0719	0728		N08	W34			1-	3		.30	.30			
ABASTUMANI	19	1027	1033 D	1028	N13	W32			1-	4		.99	1.20			
UCCLE	19	1538			N14	W41			?	3						
CLIMAX	19	2257 E	2337	2301	S14	W75			1-			.70	1.40			
NIZMIR	20	0712 E	0816	0726	S03	W88	6445	64 D	1			1.80			80	

SOLAR FLARES

JUNE 1962

OBSERVATORY	DATE JUNE 1962	OBSERVED UNIVERSAL TIME START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND.	MEASUREMENTS TIME — U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX INT.	PROVISIONAL IONOSPHERIC EFFECT
ATHENES	20	0730 E	0738 D		S08	W76	6445	8 D	1+	2		.40	4.60			
KHARKOV	20	1130 E	1146	1133	S12	W75	6445	16 D	1+			5.70		2.00		
ATHENES	20	1156 E	1207		S10	W83	6445	11 D	1+	3		.60	4.00			
CLIMAX	20	1536	1545	1541	S15	E49			1-			.40	.50			
CLIMAX	20	2037 E	2047 D		N16	E34	6459	10 D	1		2038	3.10	3.40			G-SWF
CRIMEE	21	0620 E	0735 D	0631	N19	E25	6459	75 D	2	2	0631	9.00				
ABASTUMANI	21	0622 E	0755 D	0640	N18	E26	6459	93 D	2	2		16.20	19.50		65	
ATHENES	21	0625	0642		N17	E24			1-	1		1.30	1.50			
HTE-PROVEN	21	0635 E	0730		N17	E25	6459	55 D	1			3.20	3.70			
BAKOU	21	0647 E	0744 D	0648	N20	E29	6459	57 D	1	3		3.65			60	
NIZMIR	21	0708 E	0737	0708	N21	E27			1-			.93			60	
CRIMEE	21	0745	0754	0747	N18	E24			1-	2	0747	.90				
ATHENES	21	0745	0755		N17	E25			1-	1		.60	.60			
	21	2210	2215	NO FLARE	PATROL											
ALMA ATA	22	0246	0254	0248	N16	E10			1-		0248	.62			52	
BAKOU	22	0732 E	0808 D	0734	N15	E08			1-	2		1.37			50	
HTE-PROVEN	22	0825	0836		N16	E07			1-							
ATHENES	22	0828	0840		N15	E03			1-	2		1.80	1.90			
ATHENES	22	0845	0909		N16	W75	6453	24	1+	2		1.20	4.60			
CRIMEE	22	0850 E	0910	0900	N10	W80	6452	20 D	1	1	0900	.90				
CRIMEE	22	0900 E	0912 D		N14	E02	6459	12 D	1	1	0912	3.60				
HTE-PROVEN	22	0900 E	0932		N16	E00			1-							
BAKOU	22	0901 E	0930 D	0906	N16	E03	6459	29 D	1	2		4.56			56	
ATHENES	22	0901	0935 D		N16	E03	6459	34 D	1+	2		3.60	3.70			
CAPETOWN	22	0933 E	0936 D		N15	E02	6459	3 D	1		0933	3.10	3.20			
KIEV KO	22	1215 E	1225 D		N18	E07	6459	10 D	1	1	1215	1.55			60	
	23	0220	0230	NO FLARE	PATROL											
	23	0335	0340	NO FLARE	PATROL											
	23	0350	0400	NO FLARE	PATROL											
HTE-PROVEN	23	0537	0607		N16	W00			1-							
TACHKENT	23	0550	0600 D	0554	N16	W03			1-	2	0552	1.00	1.00	1.90	60	
CRIMEE	23	0554 E	0613 D		N15	W01			1-	2	0554	1.34				
ATHENES	23	0555 E	0619		N15	E01			1-	2		1.70	1.80			
CRIMEE	23	0804	0830	0806	S07	E08	6460	26	1	2	0806	1.80				
ATHENES	23	0805	0818		S09	E04			1-	3		.30	.30			
ATHENES	23	0841	0849		N07	E16			1-	3		.30	.40			
ALMA ATA	24	0508	0516	0511	N18	W12			1-		0511	1.03			59	
ARCETRI	24	0800 E	0820 D		S02	E78	6463	20 D	1	2						
ARCETRI	24	0845 E	0930 D		S02	E78	6463	45 D	1	2						
	25	0200	0205	NO FLARE	PATROL											
ATHENES	25	0751 E	0825		N01	E33			1-	2		1.30	1.60			
ARCETRI	25	0815 E	1020 D		S01	E68	6463	125 D	2	2						
UCCLE	25	0848 E	1215 D		N00	E70	6463	207 D	1	4						
ATHENES	25	0830 E	0853		N06	W69			1-	2		.20	.60			
ARCETRI	25	0830 E	0935 D		N06	W70	6465	65 D	1	2						
UCCLE	25	0848 E	1010 D		N08	W70			1-	4						

SOLAR FLARES

JUNE 1962

OBSERVATORY	DATE JUNE 1962	OBSERVED UNIVERSAL TIME START	END	MAX PHASE	LOCATION APPROX. LAT	MER DIST	McMATH PLAGE REGION	DURATION — MINUTES	IMPORTANCE	OBS. COND	MEASUREMENTS TIME U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX WIDTH Ha	MAX INT	PROVISIONAL IONOSPHERIC EFFECT
SCHAUINS	25	0955 E	1044 D		N07	W68	6465	49 D	1	1		2.50				
SCHAUINS	25	0955 E	1113 D		N00	E67	6463	78 D	1+	1		2.70				
UCCLE	25	0848 E	1530 D		S21	E88	6466	402 D	2	4						
UCCLE	25	1040 E	1100		N08	W69			1-	4						
UCCLE	25	1120 E	1140		N08	W69			1-	4						
UCCLE	25	1242 E	1530 D		N00	E69	6463	168 D	1	4						
SCHAUINS	25	1500 E	1523		S19	E80	6466	23 D	1	2		2.50				
	26	0220	0230	NO FLARE	PATROL											
SCHAUINS	26	1030 E	1034		N01	E49			1-	2		3.00				
ALMA ATA	27	0205	0220 D	0210	N02	E43	6463	15 D	1		0210	.93			55	
	27	0305	0310	NO FLARE	PATROL											
	27	0320	0420	NO FLARE	PATROL											
ATHENES	27	0751	0825		N01	E33			1-	2		.90	1.00			
CRIMEE	27	0752 E	0844 D	0758	N00	E35			1-	2	0758	.90				
CLIMAX	27	1617	1629	1620	N00	E37			1-			.40	.40			
CLIMAX	27	2038	2051	2042	N03	E35			1-			.60	.70			
HTE-PROVEN	28	0530	0535		N02	E30			1-							
HTE-PROVEN	28	0624	0630		N01	E28			1-							
	29	0205	0300	NO FLARE	PATROL											
HTE-PROVEN	29	0610	0630		N01	E16			1-							
CRIMEE	29	0618 E	0700 D	0626	N01	E15	6463	42 D	1	2	0626	2.70				
ABASTUMANI	29	0619 E	0641	0623	N02	E16	6463	22 D	1	3		3.69	3.90		68	
ATHENES	29	0620 E	0635		N01	E15	6463	15 D	1+	3		3.80	3.90			
	30	0235	0240	NO FLARE	PATROL											
ALMA ATA	30	0252	0306	0254	S21	E16	6466	14	1		0254	1.24			65	

These flare reports are addenda to the June 1962 flares published in CRPL-215 July 1962.

ATHENES	ATHENS, GREECE
BAKOU	PIRCULI, USSR
CAPETOWN	ROYAL OBSERVATORY, CAPE OF GOOD HOPE
CAPRI F	CAPRI, ITALY (GERMAN)
CAPRI S	CAPRI, ITALY (SWEDISH)
CRIMÉE	SIMEIZ, USSR
HERSTMONCEU	ROYAL GREENWICH OBSERVATORY, HERSTMONCEUX, ENGLAND
HTE-PROVEN	HAUTE-PROVENCE
HONOLULU	HAWAII, USA
IKOMASAN	KYOTO, JAPAN
KIEV KO	KIEV GAO, USSR
KIEV KY	KIEV UNIVERSITY, USSR
LOCKHEED	LOS ANGELES, CALIF., USA
MCMATH	MCMATH-HULBERT PONTIAC, MICH., USA
MOSCOU	MOSCOW-GAISH, USSR
NEW SCHAUIN	FREIBURG, GFR
NERA	NEDERHORST den BERGH, NETHERLANDS
NIZMIR	KRASNAYA PAKHRA, USSR
SAC PEAK	SACRAMENTO PEAK, N.MEX. USA
SALTSJÖBADEN	STOCKHOLM, SWEDEN
SCHAUINS	SCHAUINSLAND, GFR
TACHKENT	TASHKENT, USSR
WENDEL	WENDELSTEIN, GFR

ALL VALUES IN THE MAXIMUM INTENSITY COLUMN FOR SAC PEAK ARE ARBITRARY UNITS (0-40) AND FOR LOCKHEED ARE ARBITRARY UNITS (10-40), NOT PERCENT OF CONTINUOUS SPECTRUM.

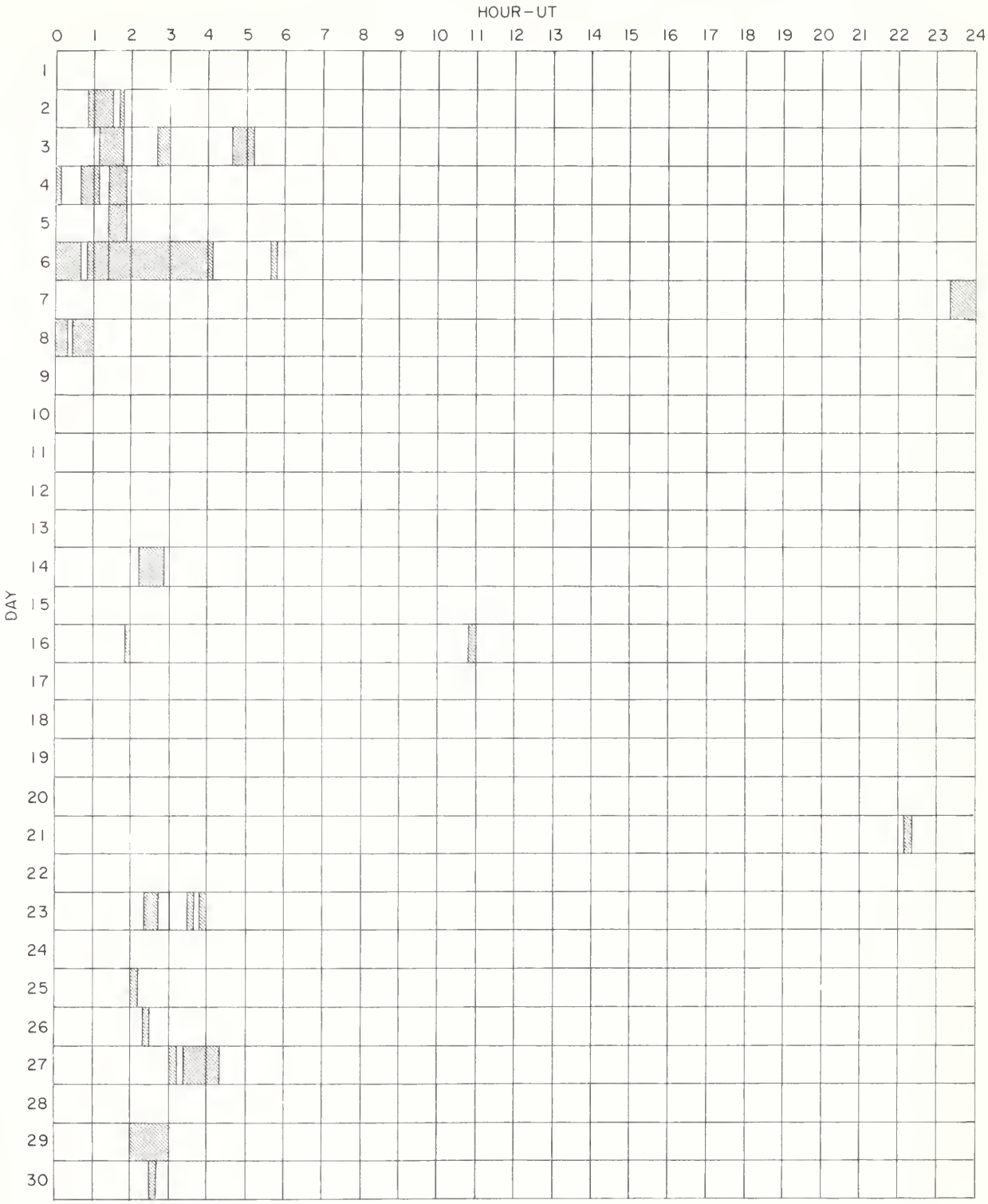
SEE DESCRIPTIVE TEXT PUBLISHED NOVEMBER 1961 FOR DEFINITION OF CORRECTED AREA VALUES LISTED FOR CLIMAX, HAWAII, LOCKHEED AND SACRAMENTO PEAK.

E = LESS THAN D = GREATER THAN U = APPROXIMATE □ = NOT REPORTED.

COMMERCE - STANDARDS - BOULDER

INTERVALS OF NO FLARE PATROL OBSERVATIONS

JUNE 1962



Stations include:

Alma-Ata
Arcetri
Athenes
Bakou
Bucharest
Capetown
Capri-F (German)
Capri-S (Swedish)
Climax
Crimée
Haute-Provence
Herstmonceux
Honolulu
Huancayo
Ikomasan
Kharkov
Kodaikanal
Lockheed
McMath-Hulbert
Meudon
Mitaka
Moscou
Nizamiah
Nizmir
Ondrejov
Sacramento Peak
Schauinsland
Tashkent
Uccle
Voroshilov
Wendelstein

IONOSPHERIC EFFECTS OF SOLAR FLARES

SHORT WAVE RADIO FADEOUTS
SUDDEN COSMIC NOISE ABSORPTION
SUDDEN ENHANCEMENTS OF ATMOSPHERICS
SUDDEN PHASE ANOMALIES
SOLAR NOISE BURSTS AT 18 Mc

AUGUST 1962

Because of unforeseen difficulties in collection of some of the basic data, the table for August 1962 Ionospheric Effects of Solar Flares will not be published until a later date.

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

SEPTEMBER 1962

ARO - OTTAWA **2800 Mc.**

Sept. 1962	Type	Start UT	Duration (Minutes)	Maximum			Remarks
				Time UT	Peak Flux	Mean Flux	
1	1 Simple 1	2143	5	2144	4	2.5	
2	3 Simple 3	1618	1 10	1637	5	3.5	
3	1 Simple 1	1258.5	2	1259.2	7	2	
3	3 Simple 3 f	1825	2 05	1846	8	3.5	
4	2 Simple 2	1239	5	1240	19	7	
	4 Post Increase		1 45		2	1.5	
4	3 Simple 3 A	1705	3 40	1808	4	2	
	2 Simple 2 f	1755.3	1	1755.8	9	2.5	
5	3 Simple 3	2035	1 15	2050	4	2	
6	3 Simple 3 A	1500	4 00	Indet.	3	2	
	1 Simple 1 f	1525.2	1	1525.6	5	3	
7	6 Complex f	1503	47.2	1529	140	44	
	4 Post Increase		3 10.8		13	4	
7	2 Simple 2 f	1644.5	27.5	1646.7	105	35	
	4 Post Increase		33		9	3	
7	1 Simple 1	2119	1	2119.5	6	3	
7	3 Simple 3 A	2149	>1 11	Indet.	6	-	
	2 Simple 2 f	2155.2	3.7	2156	8	3.3	
8	2 Simple 2 f	1136	1.5	1136.5	12	5	
	4 Post Increase		5.5		2	1	
8	1 Simple 1 f	1856	3	1857	1.5	0.6	
9	1 Simple 1	1912.7	2	1913.4	3.5	1.2	
15	1 Simple 1	1257	3	1259	6	3	
	4 Post Increase		10		3	1.5	
18	1 Simple 1	1357	4	1359	2	1	
18	1 Simple 1	1825	4	1826	1	0.5	
20	1 Simple 1	1809.5	2.5	1810.3	7	3.5	
	4 Post Increase		15		2	1	

COMMERCE - STANDARDS - BOULDER

HOURS OF OBSERVATION: JULY, AUGUST, SEPTEMBER 1962

OBSERVING PERIOD:
July 10:50 UT - 24:30 UT (approx)
August 11:00 UT - 23:50 UT (approx)
September 11:40 UT - 23:00 UT (approx)

With the following exceptions:

(1) Observations commenced: July 4 at 13:00 UT
July 5 at 13:00 UT
July 13 at 12:50 UT

(2) Observations ended: July 12 at 23:35 UT

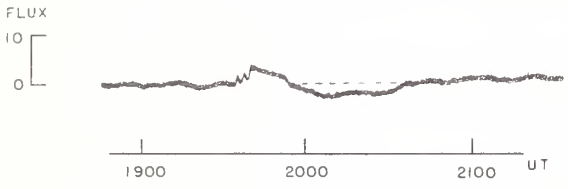
(3) No Observations: July 1 All day
July 2 All day
July 3 All day
September 2 20:30 - 22:30 UT
September 27 16:30 - 18:20 UT

IVb

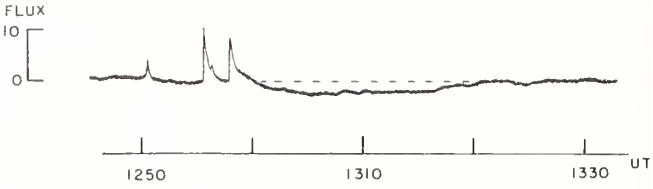
SELECTED 2800 MC/S SOLAR NOISE BURST

OTTAWA, CANADA

JULY 5, 1962

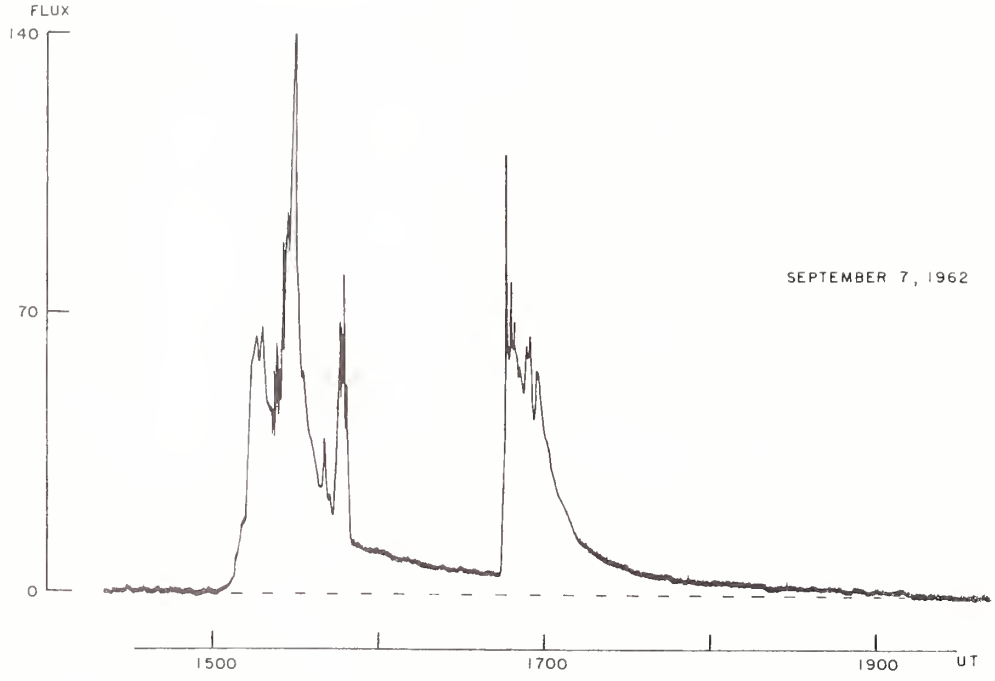


AUGUST 16, 1962



NOTE

The diminutions of flux which follow the small bursts shown above were recorded at both the Goth Hill Radio Observatory, near Ottawa and the Algonquin Radio Observatory, 150 miles from Ottawa.



COMMERCE - STANDARDS - BOULDER

SOLAR RADIO EMISSION

OUTSTANDING OCCURRENCES

SEPTEMBER 1962

BOULDER — 108 Mc.

Sept. 1962	Type	Start UT	Time of Maximum UT	Duration Minutes	Intensity
3	6	1234E	-	756D	2
3	8	1629	1630.9	07	3
4	6	1235E	2324.0	755D	2
4	2	1716.1	1716.9	3.0	2
7	6	1507	1529	48	2
7	3	1408.2	1409.0	1.1	3
8	2	1502.9	1503.6	1.0	2
[illegible]	2	1655.9	1656.9	2.0	3

	Type	Start UT	Time of Maximum UT	Duration Minutes	Intensity
13	3	1929.7	1929.6	2.2	2
16	6	1247D	2045.6E	726D	2
18	3	1346.2	1347.0	0.9	2
23	6	1917	2124.9	324D	2
24	6	1254E	-	201D	2
26	6	1256E	1441.3	700D	2
26	8	1437.1	1438.1	2.4	3
29	3	1712.6	1718.6	1.3	2
30	3	1555.9	1556.1	0.9	2

COMMERCE - STANDARDS - BOULDER

NOMINAL TIMES OF OBSERVATION

OUTSTANDING OCCURRENCES

SEPTEMBER 1962

BOULDER — 108 Mc.

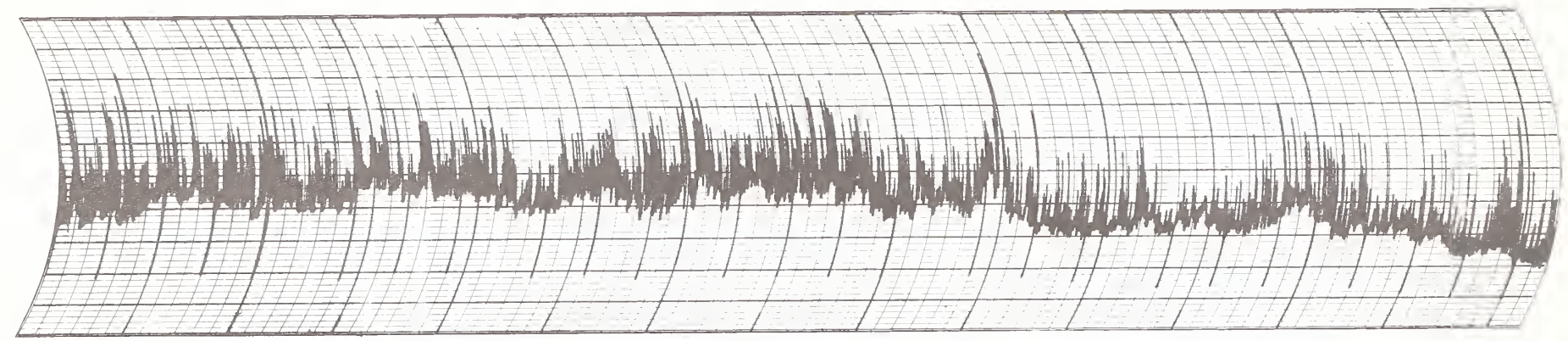
Sept. 1962	U.T.			Sept. 1962	U. T.		
1	1232-0116			16	1247-0053	I	2200-2237
2	1233-0114			17	1247-0051		
3	1234-0112			18	1248-0049		
4	1235-0110			19	1249-0048	I	0005-0048D
5	1236-0110			20	1250-0046	I	2130-2253
6	1237-0108			21	1251-2255;	I	2005-2255
7	1238-0106				2300-0044		
8	1239-0105	I	1816-2050;	22	1252-0043		
			2136-2143	23	1253-0041	I	1918-2200
9	1240-0104			24	1254-0039	I	2357-0039E
10	1241-0103			25	1255-0038	I	2006-2108
11	1242-0101			26	1256-0036		
12	1243-0059			27	1257-0034		
13	1244-0058			28	1258-0033		
14	1245-0056	I	1945-2235	29	1259-0015		
15	1246-0054			30	1300-0030		

COMMERCE - STANDARDS - BOULDER

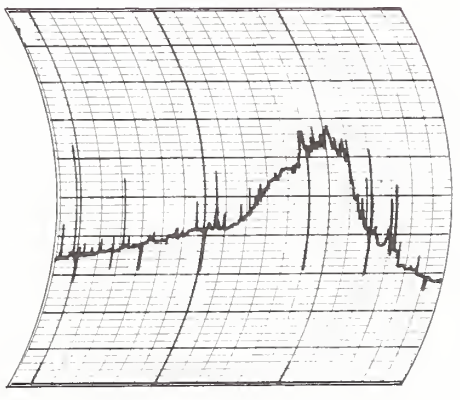
SOLAR NOISE BURSTS

BOULDER

108 Mc.



SEPTEMBER 3, 1962



SEPTEMBER 7, 1962

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

SEPTEMBER 1962

HAO BOULDER

7.6 - 41 Mc.

Date 1962	Bursts			Frequency Range (mc)
	Type	Time (U.T.)	Intensity	
1 Sep	III	1858.45-1859.15	1+	17-41
	continuum	1859.15-1930.30	1	21-41
	III	1904-1907	1+	11-41
	III	1933.15-1933.45	1-	22-41
	III	1938.15-1938.45	1-	21-38
	III	2039.15-2039.30	1-	23-37
	III	2250.30-2250.45	1-	27-39
2 c	continuum	1627-2454	1-	21-41
	III	1759.45-1800.15	2	24-39
	III	1956.00-1957	1	8-41
	III	1958-1958.30	1	8-41
	III	2055.45-2056.30	1	8-41
3	continuum	b1354-1829	1	16-41
	III	1616.45-1617.45	2	7.6-41
	continuum	1829-1925	3	7.6-41
	continuum	1925-2400	1	12-41
	continuum	2400-a2455	1	21-41
4	continuum	b1357-2000	2	7.6-41
	continuum	2000-2400	1	15-41
	continuum	2400-a2451	1-	21-41
5	continuum	b1350-2255	1-	21-41
	III	1414.35-1450.15	1	16-41
	III	1514.15-1514.45	1	16-41
	III	1515.15-1515.45	1	21-41
6	III	1419-1419.15	1-	21-41
	III	1528.15-1528.30	1	21-41
	III	1846-1846.15	2	16.5-41
7	II	1514-1535	3	18-41
	IV	1535-1740	3	20-41
	III	2116.30-2117	1	16-41
	III	2117.30-2117.45	1-	20-37
	III	2119.30-2120	1	16-41
	III	2155.45-2156.45	1+	12-41
	III	2157-2157.45	1-	16-32
8	III	1856.15-1856.45	1-	24-41
9	III	1640.30-1641.45	3	10-41
	III	1737.15-1738	1	12-41
	III	2113.30-2113.45	1-	18-40
10	III	1738.15-1740.45	1+	9-41
	III	2318.15-2320	1	22-41
11	III	1801.30-1802.30	1+	16-41
12	III	1424.45-1425	1-	21-35
,	III	1431.15-1431.45	1-	23-35
	continuum	1520-1630	1-	28-41
	• III	1543.30-1544	1	23-38

Date 1962	Bursts			Frequency Range (mc)
	Type	Time (U.T.)	Intensity	
12 Sep	III	1605.30-1606	1-	20-40
13	III	1411.15-1411.45	1	17.5-41
	III	1925.45-1930.15	1	25-41
	continuum	1932-1941.30	2	20-41
	III	1950.45-1951.15	1-	27-35
15	continuum	1725-a2433	1-	24-41
16	continuum	b1407-a2425	1+	20-41
	III	2407.30-2409.30	2	20-41
17	continuum	b1411-2020	1-	21-41
18	III	1552.45-1553	1-	20-40
23	III	1559.30-1559.45	1	23-35
	III	1626-1626.15	1	21-41
	continuum	1633-2150	1	21-41
	III	1820.45-1822.15	1	8-41
	III	1907-1908	1	8-41
	III	2214.45-2215	1-	23-39
24	continuum	1645-1715	1-	23-41
	III	1704.15-1704.30	1-	26-41
	III	2055-2055.15	1-	23-41
	III	2102-2102.15	1	16-39
	III	2416-2416.15	1	21-41
25	continuum	b1359-2400	1-	20-41
	III	1746.15-1746.45	1	9.5-41
	III	1748-1748.30	1	9.5-41
	III	1749.15-1749.45	1	9.5-41
26	continuum	b1414-2100	1-	22-41
	III	2115.30-2116.15	1	20-41
	III	2116.30-2117.30	2	19-41
	continuum	2235-2350	1-	27-41
27	III	1455.15-1455.30	1-	27-41
	III	1840.30-1840.45	1-	24-36
	III	2322.45-2323.30	1	16-41
28	III	1845-1845.15	1-	25-41
	continuum	1940-2135	1-	23-41
	III	2241.15-2241.30	1-	22-41
	III	2322.15-2323	1+	15-41
	III	2339.15-2339.45	1-	22-41
29	III	1926-1926.15	1-	21-41
30	III	2154.15-2154.45	1+	12.5-41
	III	2217.45-2218	1	24-41

c = Many faint III's, 1415-1627

- Position shifted relative to continuum

CONSENSUS - STANDARDS - DEVIATIONS

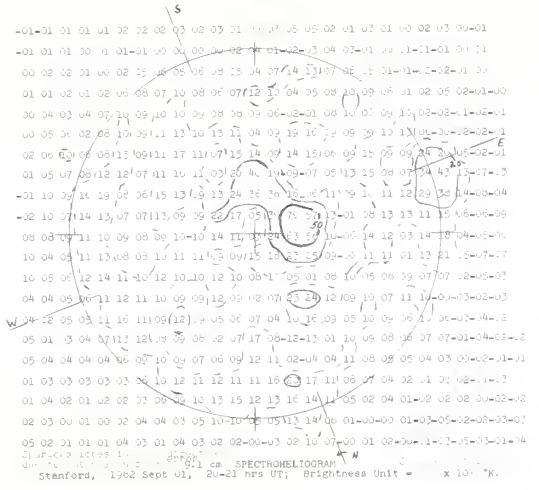
SOLAR RADIO EMISSION SPECTROHELIOGRAMS

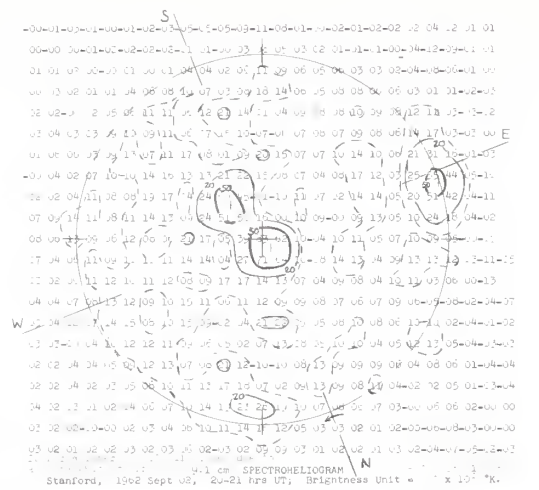
IAF

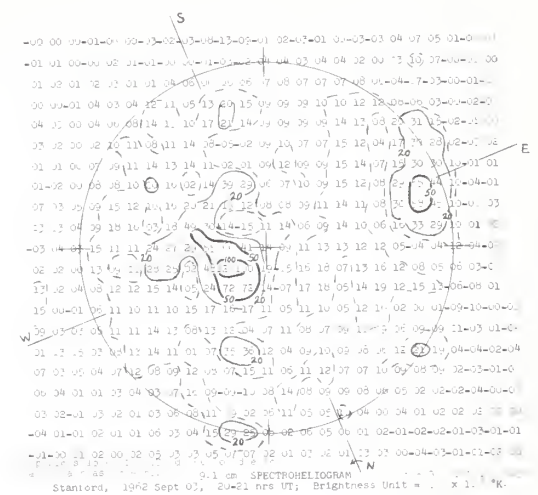
STANFORD

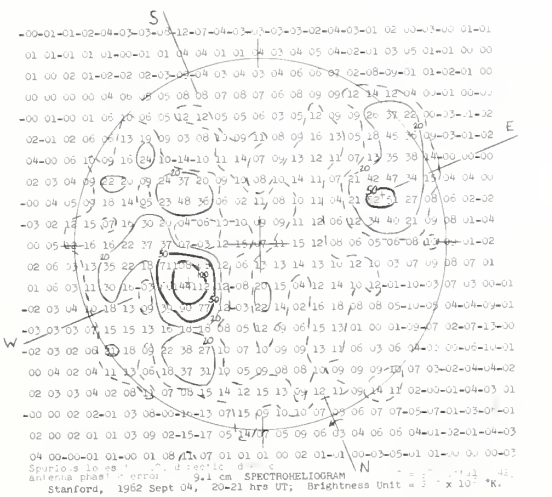
SEPTEMBER 1962

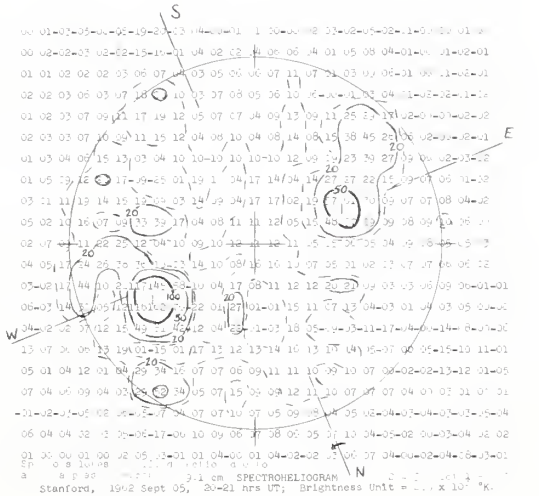
9.1 cm

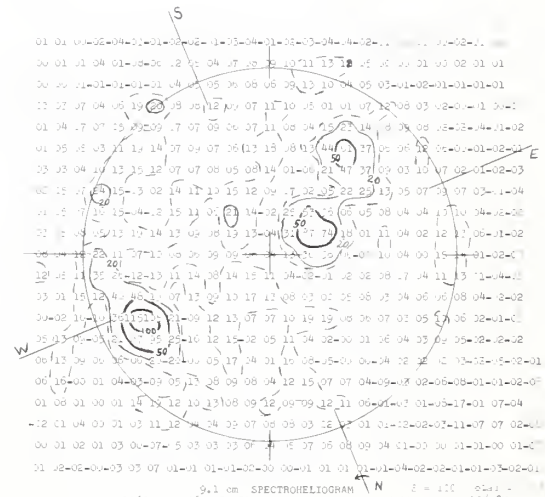










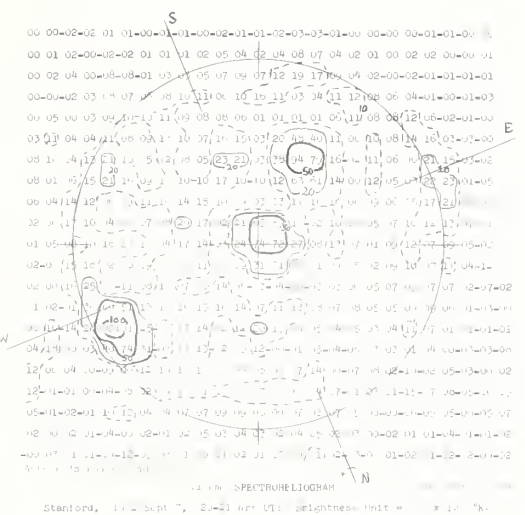


SOLAR RADIO EMISSION SPECTROHELIOGRAMS

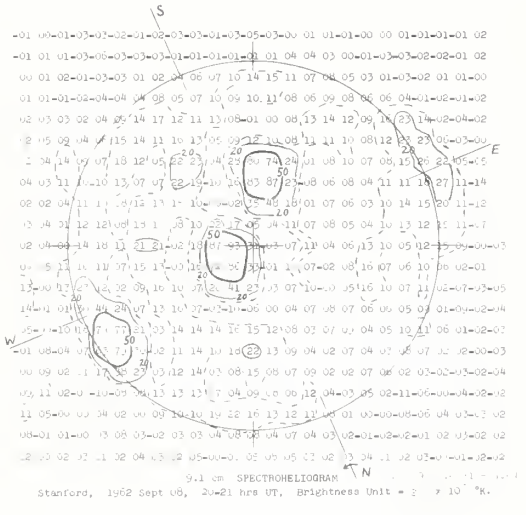
STANFORD

SEPTEMBER 1962

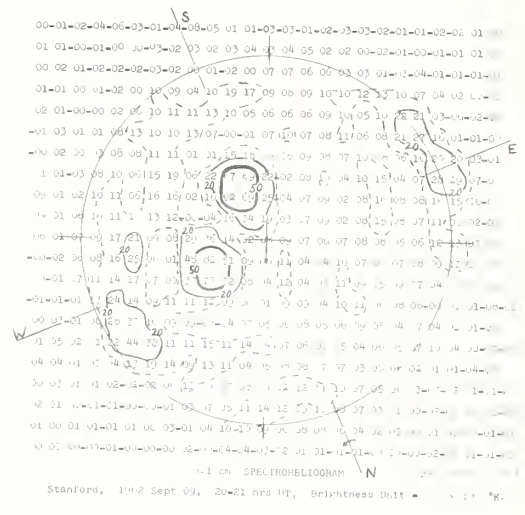
9.1 cm



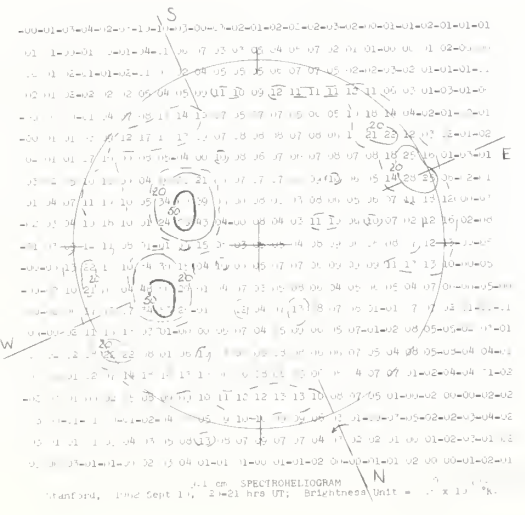
Stanford, 1962 Sept 07, 20-21 hrs UT, Brightness Unit = x 10 °K.



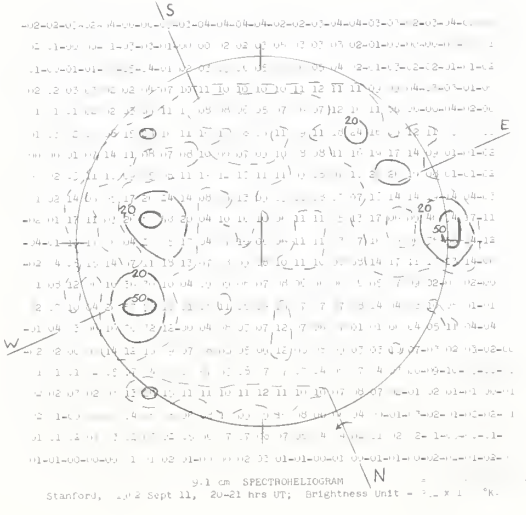
Stanford, 1962 Sept 08, 20-21 hrs UT, Brightness Unit = x 10 °K.



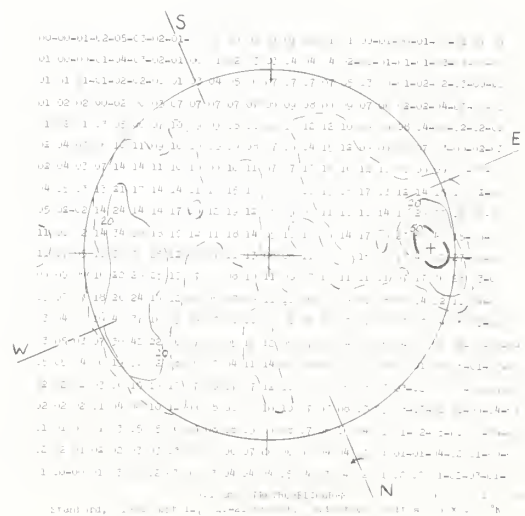
Stanford, 1962 Sept 09, 20-21 hrs UT, Brightness Unit = °K.



Stanford, 1962 Sept 10, 20-21 hrs UT, Brightness Unit = x 10 °K.



Stanford, 1962 Sept 11, 20-21 hrs UT, Brightness Unit = x 10 °K.



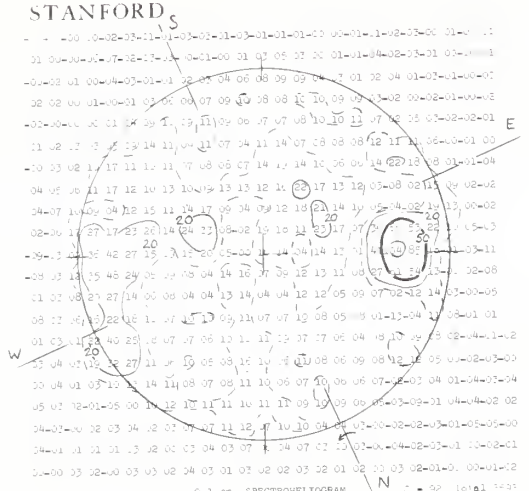
Stanford, 1962 Sept 12, 20-21 hrs UT, Brightness Unit = x 10 °K.

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

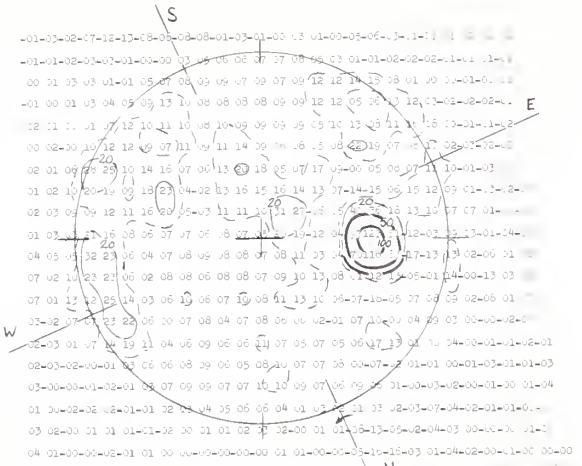
SEPTEMBER 1962

STANFORD

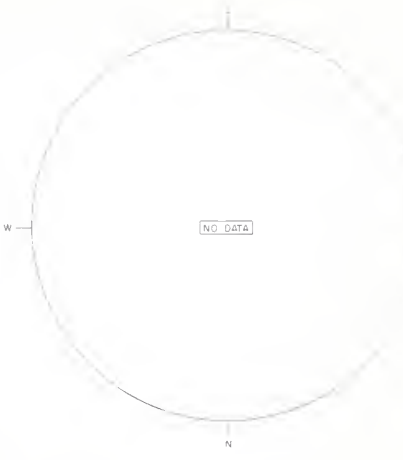
9.1 cm



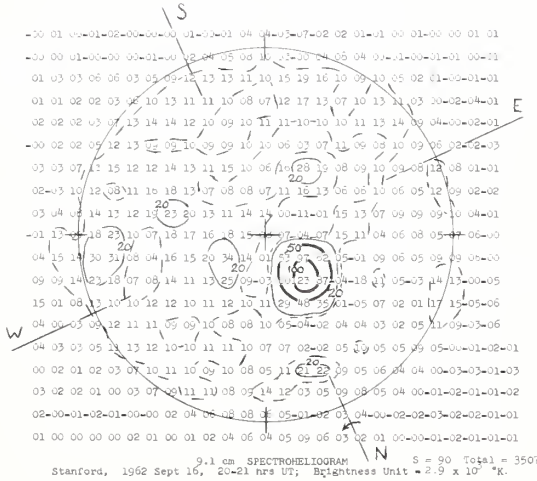
9.1 cm SPECTROHELIOGRAM S = 92 Total 3293
Stanford, 1962 Sept 13, 20-21 hrs UT; Brightness Unit = 2.9 x 10^7 °K.



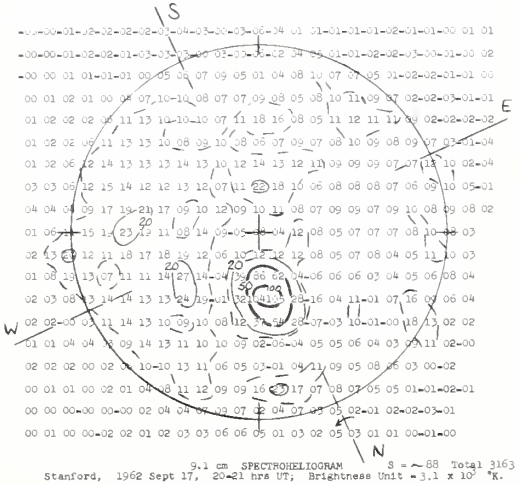
9.1 cm SPECTROHELIOGRAM S = 88 Total 3163
Stanford, 1962 Sept 14, 20-21 hrs UT; Brightness Unit = 3.1 x 10^7 °K.



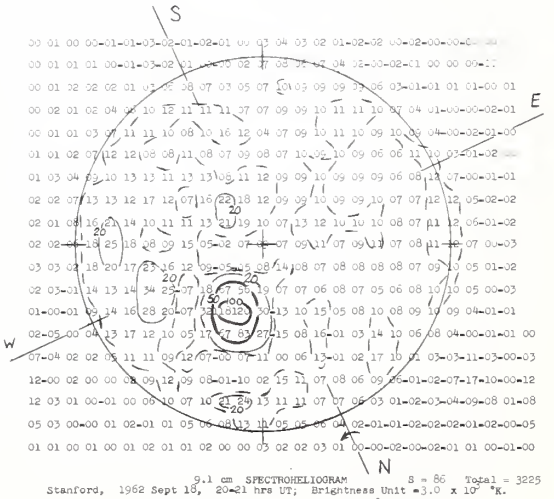
1962 SEPT 15



9.1 cm SPECTROHELIOGRAM S = 90 Total = 3507
Stanford, 1962 Sept 16, 20-21 hrs UT; Brightness Unit = 2.9 x 10^7 °K.



9.1 cm SPECTROHELIOGRAM S = ~ 88 Total 3163
Stanford, 1962 Sept 17, 20-21 hrs UT; Brightness Unit = 3.1 x 10^7 °K.



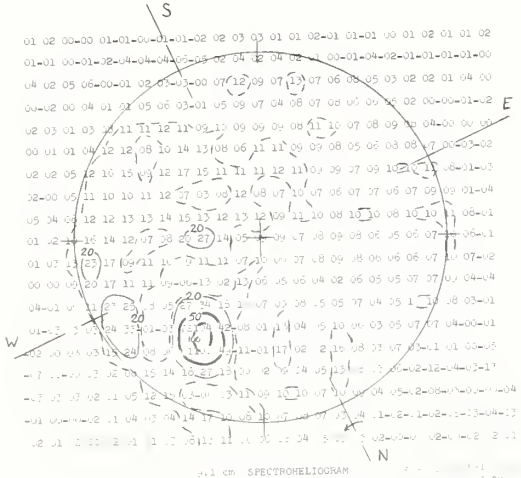
9.1 cm SPECTROHELIOGRAM S = 86 Total = 3225
Stanford, 1962 Sept 18, 20-21 hrs UT; Brightness Unit = 3.0 x 10^7 °K.

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

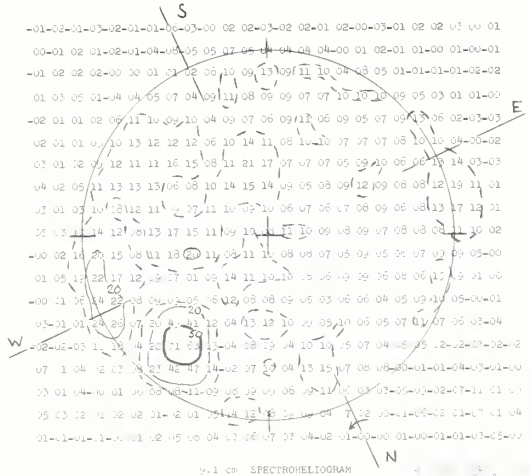
SEPTEMBER 1962

STANFORD

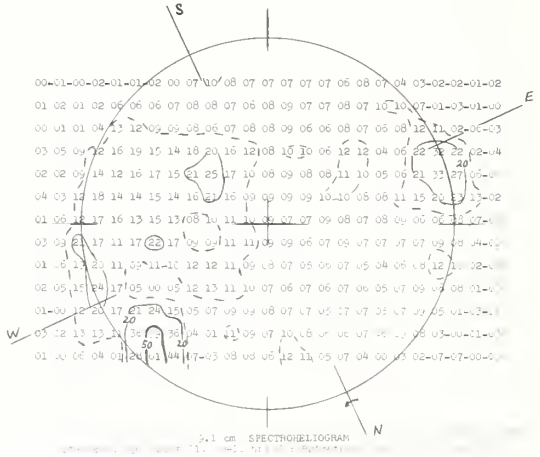
9.1 cm



9.1 cm SPECTROHELIOGRAM
Stanford, 1962 Sept 19, 20-21 hrs UT; Brightness Unit = [illegible] x 10⁴ °K.

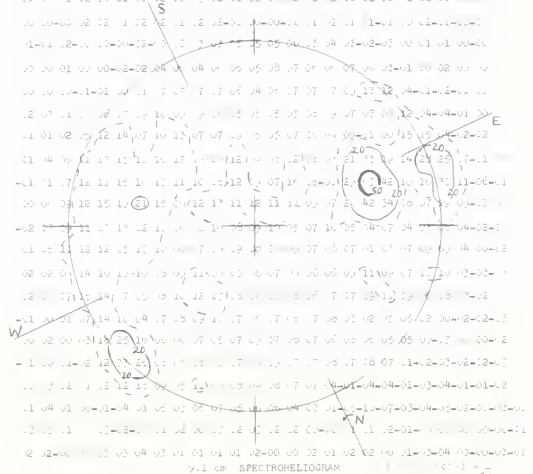


9.1 cm SPECTROHELIOGRAM
Stanford, 1962 Sept 20, 20-21 hrs UT; Brightness Unit = [illegible] °K.

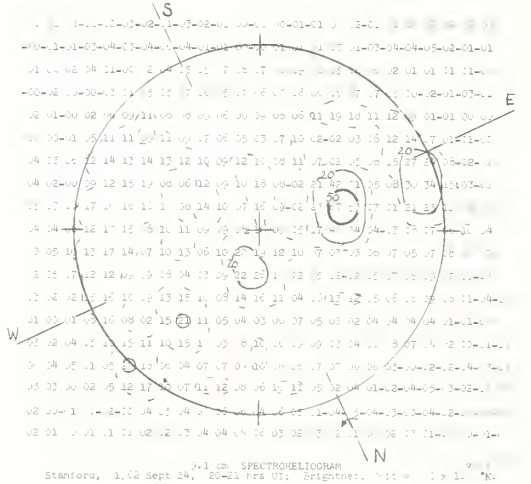


9.1 cm SPECTROHELIOGRAM
Stanford, 1962 Sept 21, 20-21 hrs UT; Brightness Unit = [illegible] °K.

1962 SEPT 22



9.1 cm SPECTROHELIOGRAM
Stanford, 1962 Sept 22, 20-21 hrs UT; Brightness Unit = [illegible] x 10⁴ °K.



9.1 cm SPECTROHELIOGRAM
Stanford, 1962 Sept 24, 20-21 hrs UT; Brightness Unit = [illegible] x 10⁴ °K.

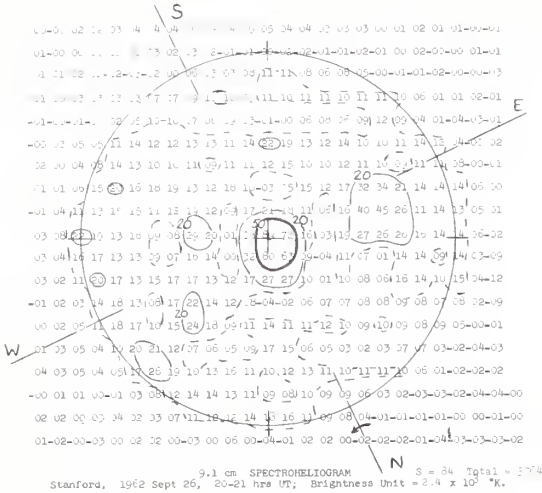
SOLAR RADIO EMISSION SPECTROHELIOGRAMS

SEPTEMBER 1962

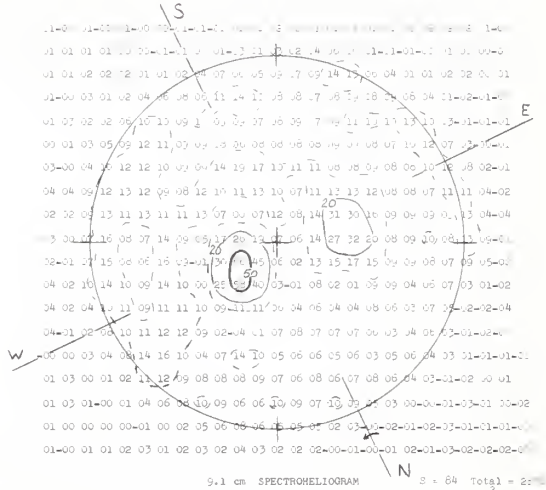
STANFORD

9.1 cm

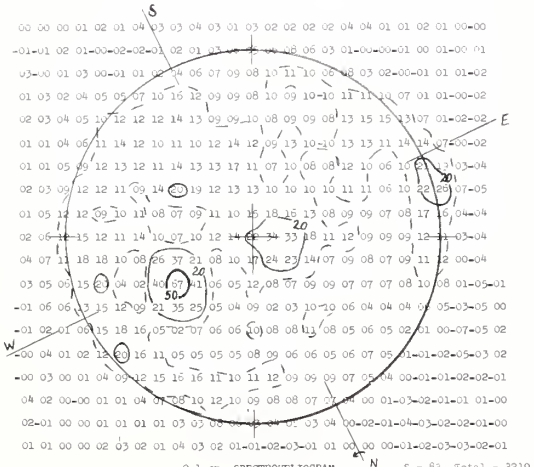
1962 SEPT 25



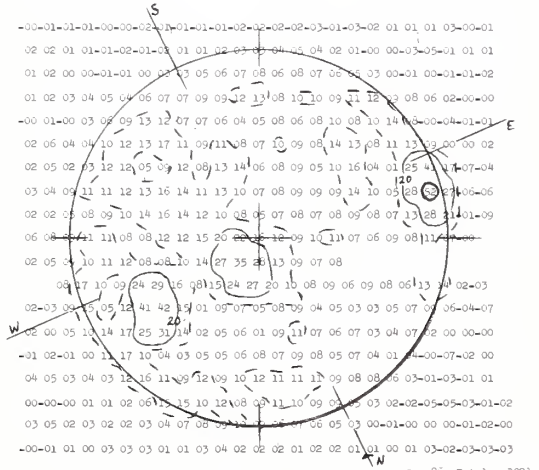
9.1 cm SPECTROHELIOGRAM S = 84 Total = 3074
Stanford, 1962 Sept 26, 20-21 hrs UT; Brightness Unit = 2.4 x 10^3 °K.



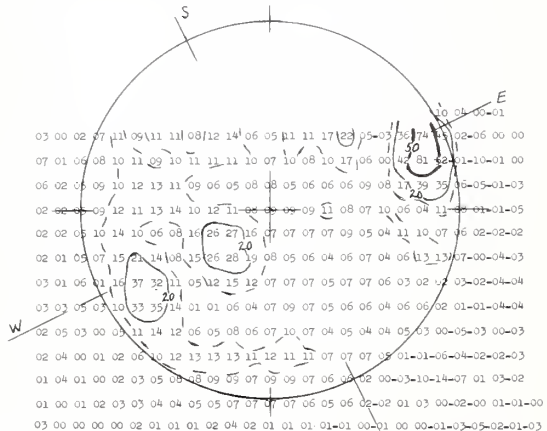
9.1 cm SPECTROHELIOGRAM S = 84 Total = 2[illegible]
Stanford, 1962 Sept 27, 20-21 hrs UT; Brightness Unit = 3.2 x 10^3 °K.



9.1 cm SPECTROHELIOGRAM S = 83 Total = 3219
Stanford, 1962 Sept 28, 20-21 hrs UT; Brightness Unit = 2.7 x 10^3 °K.



9.1 cm SPECTROHELIOGRAM S = 86 Total = 3021
Stanford, 1962 Sept 29, 20-21 hrs UT; Brightness Unit = 3.0 x 10^3 °K.



9.1 cm SPECTROHELIOGRAM S = 90 Total = 2938
Stanford, 1962 Sept 30, 20-21 hrs UT; Brightness Unit = 3.2 x 10^3 °K.

COSMIC RAY INDICES

Climax Neutron Monitor

IGC STATION B 305

AUGUST 1962

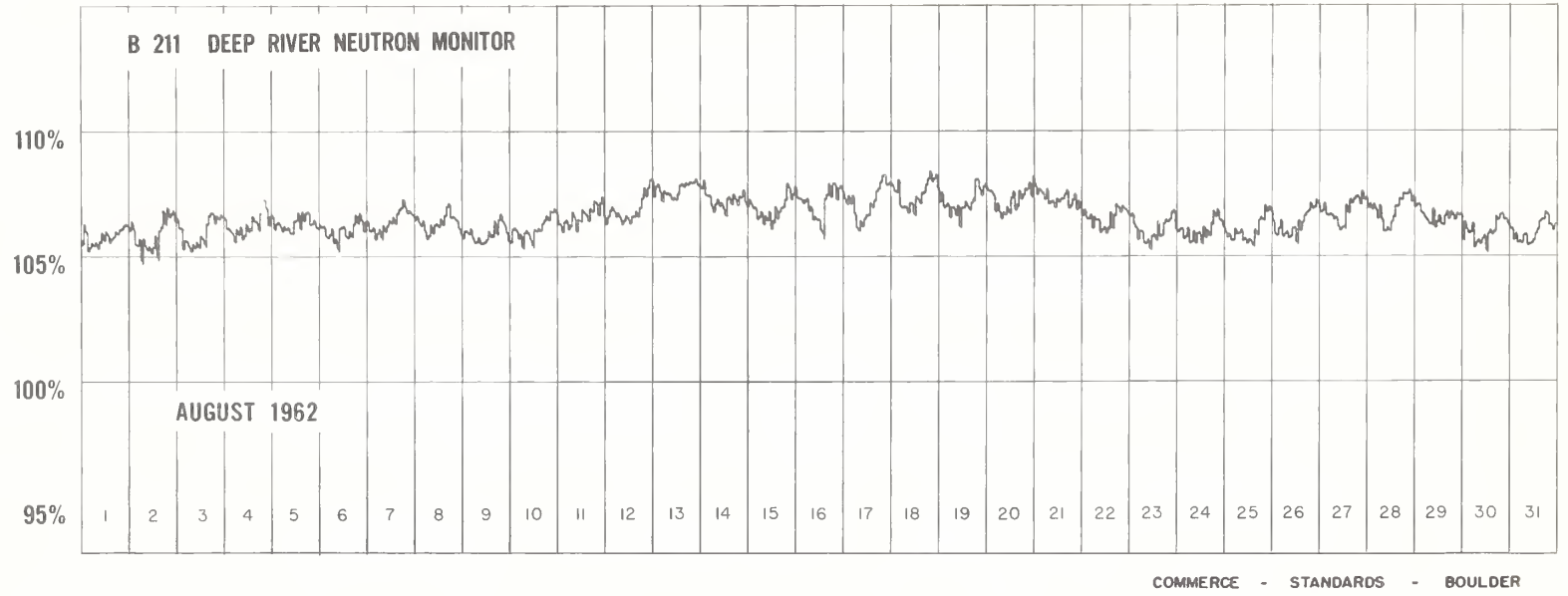
Aug. 1962	Daily Average Counts/hr*		Aug. 1962	Daily Average Counts/hr*	
1	3066.9		16	3107.5	+ 27
2	3069.3		17	3107.6	+ 29
3	3077.3		18	3107.6	
4	3073.8		19	3109.0	
5	3079.1		20	3104.8	
6	3080.0	+ 32	21	3094.7	
7	3091.2	+ 10	22	3058.1	
8	3076.5		23	3089.5	
9	3062.2		24	3085.0	
10	3073.1		25	3082.2	
11	3082.7		26	3085.2	
12	3089.5		27	3093.9	
13	3106.9		28	3096.5	
14	3099.2	+ 38	29	3094.0	
15	3100.0		30	3100.3	
			31	3093.8	

COMMERCE - STANDARDS - BOULDER

* Scaling Factor 128
+ Number of Section Hours

COSMIC RAY INDICES

(Pressure Corrected Hourly Totals)

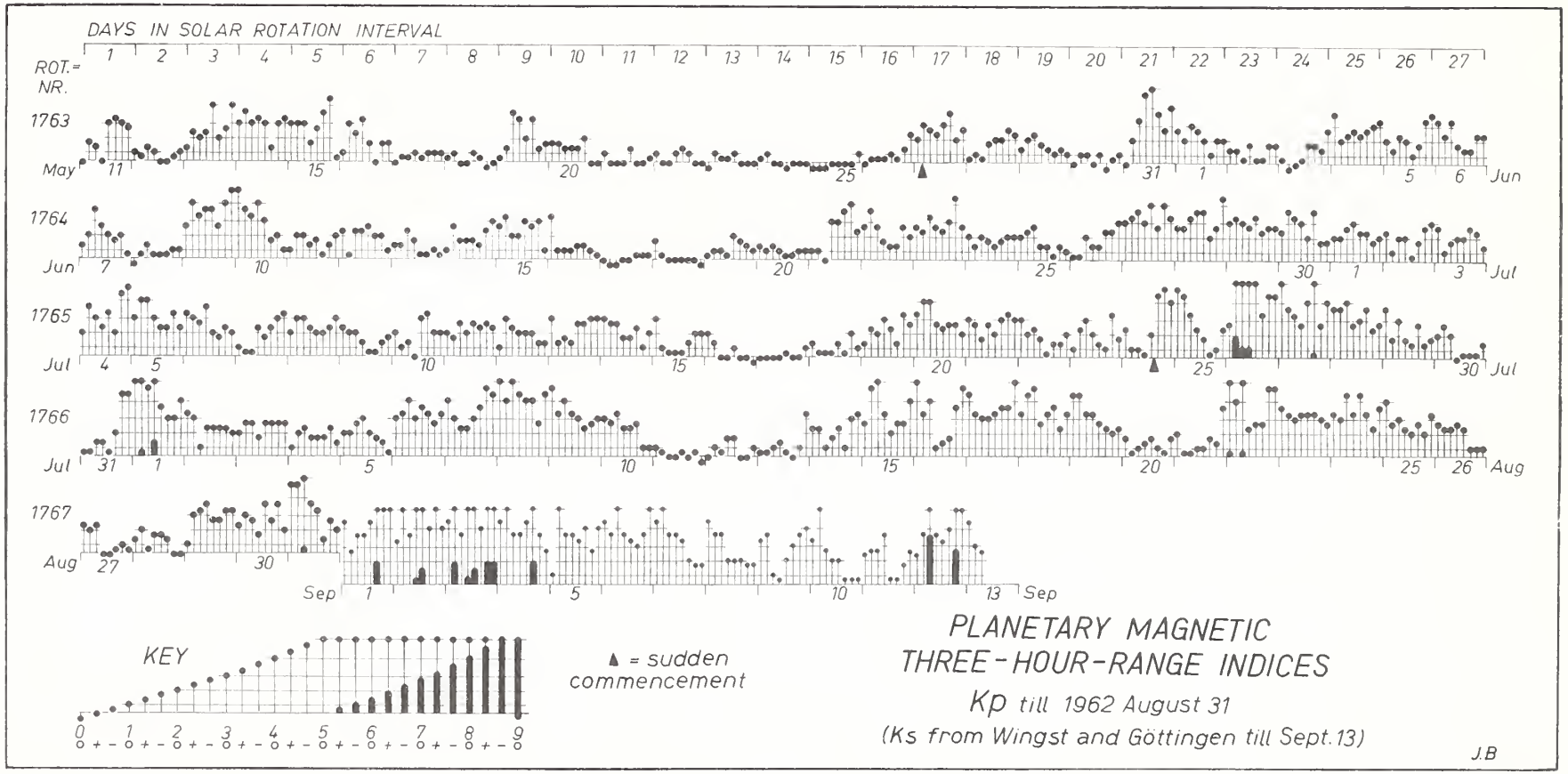


GEOMAGNETIC ACTIVITY INDICES

AUGUST 1962

Aug. 1962	C	Values Kp Three hour Gr. interval 1 2 3 4	5 6 7 8	Sum	Ap	Final Selected Days
1	1.5	5o 5+ 5- 6o	4- 3o 3o 4o	35-	38	Five
2	0.8	3+ 3o 1o 2+	2+ 2+ 2+ 2o	19-	10	Quiet
3	0.8	2o 3- 3- 2-	3- 3- 3- 3-	20-	11	11
4	0.4	1o 2o 2+ 2-	2- 2- 2+ 1+	14o	6	12
5	0.5	2o 2o 3- 3o	2o 2- 1+ 1-	15+	8	13
						20
6	1.0	3o 3+ 4o 3o	4- 3+ 3- 3+	26+	18	28
7	1.1	4o 3o 2+ 2+	3o 4- 5- 4+	27+	21	
8	1.3	5o 4o 5o 4+	4o 4o 3- 4+	33+	32	
9	1.1	5- 3+ 4o 3+	3o 2+ 3- 3o	26+	19	
10	0.7	3o 3- 3+ 2+	2+ 3- 1o 1o	18+	10	
11	0.0	1o 1- 0+ 0+	1- 0+ 1- 0o	4o	2	Five
12	0.1	0+ 1o 1- 2-	2- 0+ 0+ 1o	7o	4	Disturbed
13	0.3	1- 1- 1o 1+	1- 0+ 1o 3+	9o	5	1
14	0.7	2+ 2+ 1o 2-	2+ 1o 3o 3+	17o	9	8
15	1.1	3- 5- 5o 3+	2o 3- 3- 4o	27o	22	17
						22
16	1.1	5o 3+ 4o 1o	1+ 2- 4- 5-	25-	21	31
17	1.2	4+ 3+ 3o 3o	3+ 4- 4- 5o	29+	24	
18	1.1	3+ 4+ 5- 3-	3+ 4- 2+ 3+	28-	21	
19	1.0	4+ 4+ 3+ 3+	3- 2+ 2o 2+	25-	17	
20	0.2	2- 1- 1o 1+	2- 1o 1- 2-	10-	5	
21	0.4	2o 1- 1- 1o	1o 2- 1+ 4-	12o	7	Ten
22	1.4	5+ 4o 5+ 2+	3- 3- 5- 5-	32-	31	Quiet
23	1.0	4- 3+ 3o 3+	3+ 3+ 3o 3-	26-	17	4
24	1.1	3+ 3o 4+ 3+	4+ 3+ 2+ 4-	28-	20	5
25	0.9	4o 3- 3o 2+	2o 3- 2o 3+	22o	13	11
						12
26	0.4	3- 2+ 2+ 3-	2+ 1o 1o 1o	15+	8	13
27	0.1	2+ 2o 2+ 0+	0+ 1- 1o 1-	10-	5	20
28	0.2	1+ 2o 1- 2-	2- 1+ 0+ 0+	9+	4	21
29	1.1	1o 3o 3+ 4-	3- 3- 3+ 3+	23o	15	26
30	1.0	2+ 3o 3- 2-	4- 3- 4- 2o	22-	13	27
31	1.2	5- 5- 5+ 4-	3+ 1+ 3- 2o	28-	25	28
Mean:	0.80			Mean:	15	

COMMERCE - STANDARDS - BOULDER


DAYS IN SOLAR ROTATION INTERVAL
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
ROT.= NR.
1763
May 11 15 20 25 31 1 5 6 Jun
1764
Jun 7 10 15 20 25 30 1 3 Jul
1765
Jul 4 5 10 15 20 25 30 Jul
1766
Jul 31 1 5 10 15 20 25 26 Aug
1767
Aug 27 30 Sep 1 5 10 13 Sep
KEY
0 + - 0 + - 0 + - 0 + - 0 + - 0 + - 0 + - 0 + - 0 + - 0
1 2 3 4 5 6 7 8 9
▲ = sudden commencement
PLANETARY MAGNETIC
THREE-HOUR-RANGE INDICES
Kp till 1962 August 31
(Ks from Wingst and Göttingen till Sept. 13)
J.B

COMMERCE - STANDARDS - BOULDER

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

AUGUST 1962

NORTH ATLANTIC

AUG 1962	NORTH ATLANTIC 6-HOURLY QUALITY FIGURES				SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF				WHOLE DAY INDEX	ADVANCE FORECASTS (J-REPORTS) FOR WHOLE DAY, ISSUED IN ADVANCE BY				GEOMAGNETIC K FR	
	00 TO 06	06 TO 12	12 TO 18	18 TO 24	00	06	12	18		1-7 DAYS FINAL J_S	1-7 DAYS SDW J	1-3 DAYS J	1-7 DAYS	HALF DAY (1)	(2)
01	4+	2+	5-	5	6	3	4	4	(4)	6	6	(5)	3		
02	4	3+	6	6+	5	3	5	6	5-	4	4	2	2		
03	5+	4-	6-	6-	5	4	6	6	5-	4	4	3	2		
04	6-	5-	6+	6+	5	4	6	6	6-	5	5	2	1		
05	6	5-	6-	6+	6	5	6	6	6-	5	5	3	2		
06	5	4+	5	5+	6	4	6	5	5	6	6	(4)	3		
07	5	5	5+	5+	5	5	6	6	5+	6	6	3	(4)		
08	5-	4	4+	5-	4	4	5	5	(4+)	6	6	(5)	3		
09	4-	3+	4+	5+	5	4	5	5	(4)	4	4	(4)	3		
10	4+	5-	6-	6+	4	3	5	6	5	5	5	3	2		
11	5+	5	6	6+	6	4	6	6	6-	6	6	1	1		
12	6	5	6+	6+	6	5	6	6	6	6	6	2	1		
13	6+	5-	6	7-	6	5	6	6	6	6	6	1	2		
14	6	6-	6+	6	6	4	7	6	6	6	6	2	3		
15	6-	5	6-	6	5	5	6	6	6-	6	6	(4)	3		
16	5-	4+	6-	6-	5	3	5	6	5	4	4	(4)	3		
17	5-	4	6	5+	5	4	6	6	5-	5	5	3	3		
18	5	4+	6+	6-	5	4	6	6	5	6	6	(4)	3		
19	5	3+	6	6	5	4	6	6	5-	6	6	(4)	2		
20	5+	4	6-	6-	5	4	6	6	5	6	6	2	1		
21	6	6-	6	6	5	4	6	6	6-	4	4	1	3		
22	4+	3	6	6	6	4	5	5	(4+)	4	4	(4)	(4)		
23	4+	3+	6	6+	4	3	6	6	5-	4	4	(4)	3		
24	5	4	6-	6+	4	4	6	6	5	4	4	(4)	3		
25	5	4-	6-	6	5	4	6	6	5-	5	5	3	3		
26	5+	4-	6	6+	5	4	6	6	5	6	6	3	2		
27	6-	5	6+	7-	6	4	6	6	6	6	6	3	1		
28	6	5	6-	6-	6	4	6	6	6-	5	5	2	1		
29	6	5-	6+	6	6	5	6	5	6-	5	5	3	3		
30	5+	4	6	6-	4	4	6	6	5	5	5	3	3		
31	4	3	5	5+	5	3	5	5	(4)	5	5	(5)	2		
Score: Quiet Periods P					16	6	21	24		10	10				
S					8	4	8	7		15	15				
U					0	1	0	0		0	0				
F					0	2	0	0		1	1				
Disturbed Periods P					2	13	0	0		2	2				
S					3	5	2	0		1	1				
U					0	0	0	0		0	0				
F					2	0	0	0		2	2				

NORTH PACIFIC

NORTH PACIFIC 12-HOURLY QUALITY FIGURES			SHORT-TERM FORECASTS ISSUED AT		WHOLE DAY INDEX	ADVANCE FORECASTS (J_P REPORTS) FOR WHOLE DAY, ISSUED IN ADVANCE BY				GEOMAGNETIC K_{SI}	
0700 TO 1900	1900 TO 0700		0600	1800		1-7 DAYS FINAL J_{PS}	1-7 DAYS SDW J_P	1-3 DAYS	1-7 DAYS	HALF DAY (1)	(2)
3	4		3	5	(4)	5	5	(6)	(4)		
5	6		3	5	5	4	4	2	2		
5	6		5	6	6	4	4	2	2		
6	7		5	6	6	5	5	2	1		
6	7		6	6	6	5	5	3	2		
5	6		6	6	6	6	6	(4)	3		
5	6		4	4	5	6	6	3	(4)		
3	5		4	4	(4)	6	6	(5)	(4)		
5	5		4	5	5	4	4	(4)	2		
6	7		4	6	6	4	4	3	2		
5	7		5	6	6	5	5	0	0		
6	7		5	6	7	6	6	1	0		
6	7		5	6	6	6	6	0	1		
6	6		6	6	6	6	6	1	2		
6	6		4	6	6	6	6	(4)	2		
5	6		4	5	6	5	5	3	2		
6	6		5	5	6	6	6	3	3		
5	5		5	5	5	6	6	(4)	3		
5	5		5	5	5	6	6	(4)	2		
6	5		6	6	6	6	6	1	1		
6	6		6	6	6	4	4	0	1		
6	6		4	5	6	4	4	(4)	3		
5	6		6	6	5	4	4	(4)	2		
5	6		6	6	5	5	5	(4)	3		
6	5		5	6	6	6	6	3	1		
6	6		6	6	6	6	6	2	0		
6	6		6	6	5	5	5	1	1		
6	6		6	6	6	5	5	3	2		
6	6		5	6	5	6	6	2	2		
5	6		4	5	(4)	6	6	(5)	2		
						11					
						13					
						0					
						4					
						0					
						1					
						0					
						2					

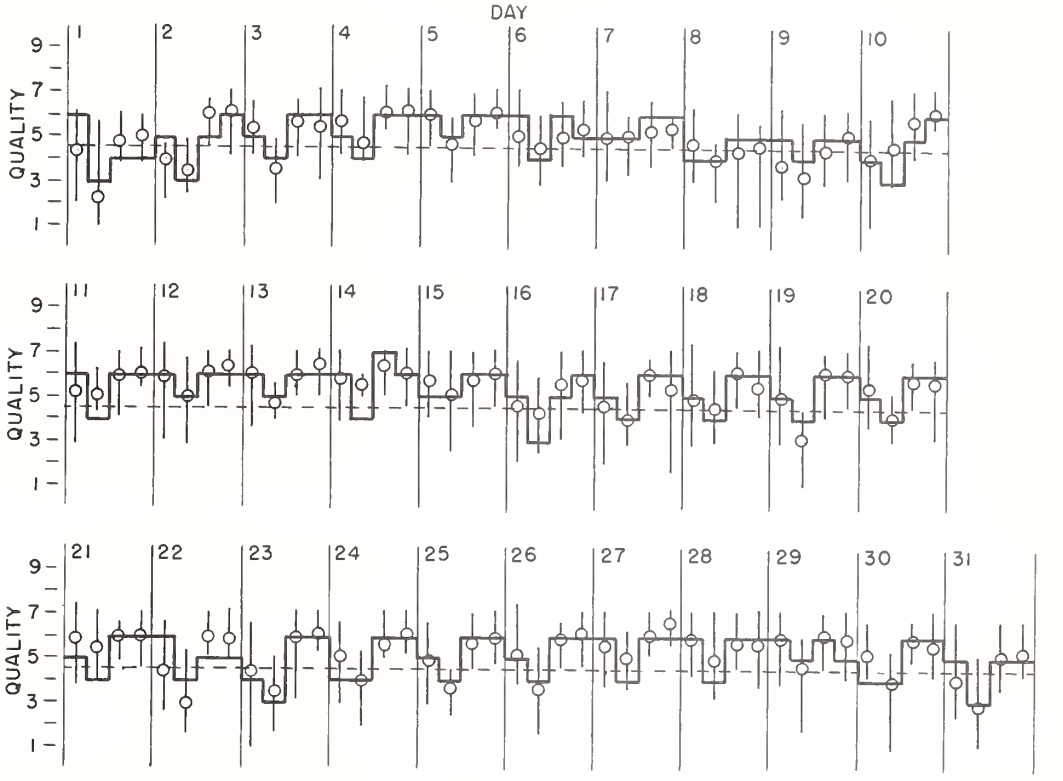
( ) Represent disturbed values
All times are Universal Time (U.T.)

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

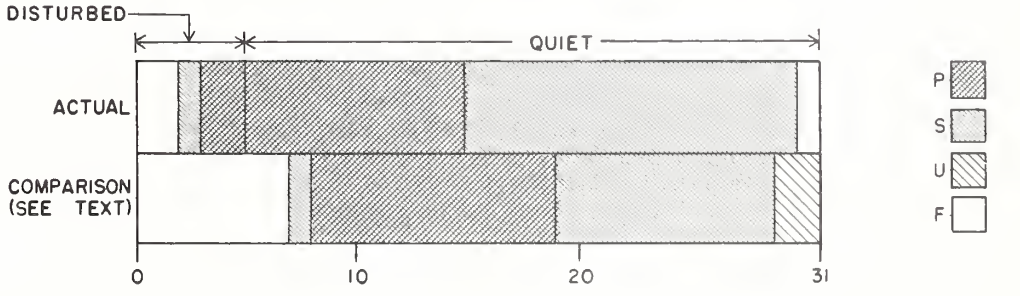
NORTH ATLANTIC

SEPTEMBER 1962

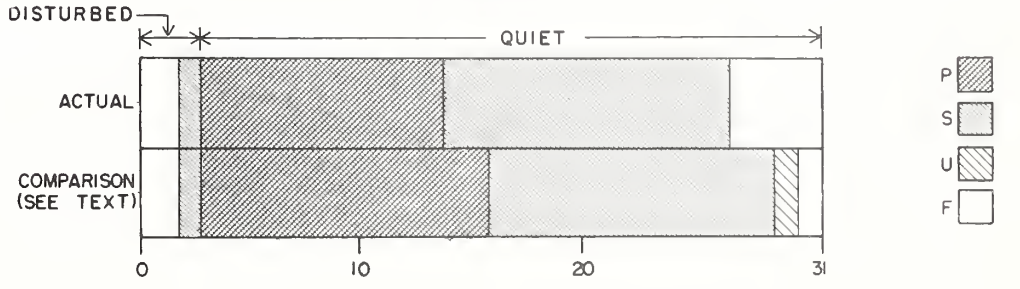
— Short-term forecast
o Quality figure
| Range of reports



NORTH ATLANTIC

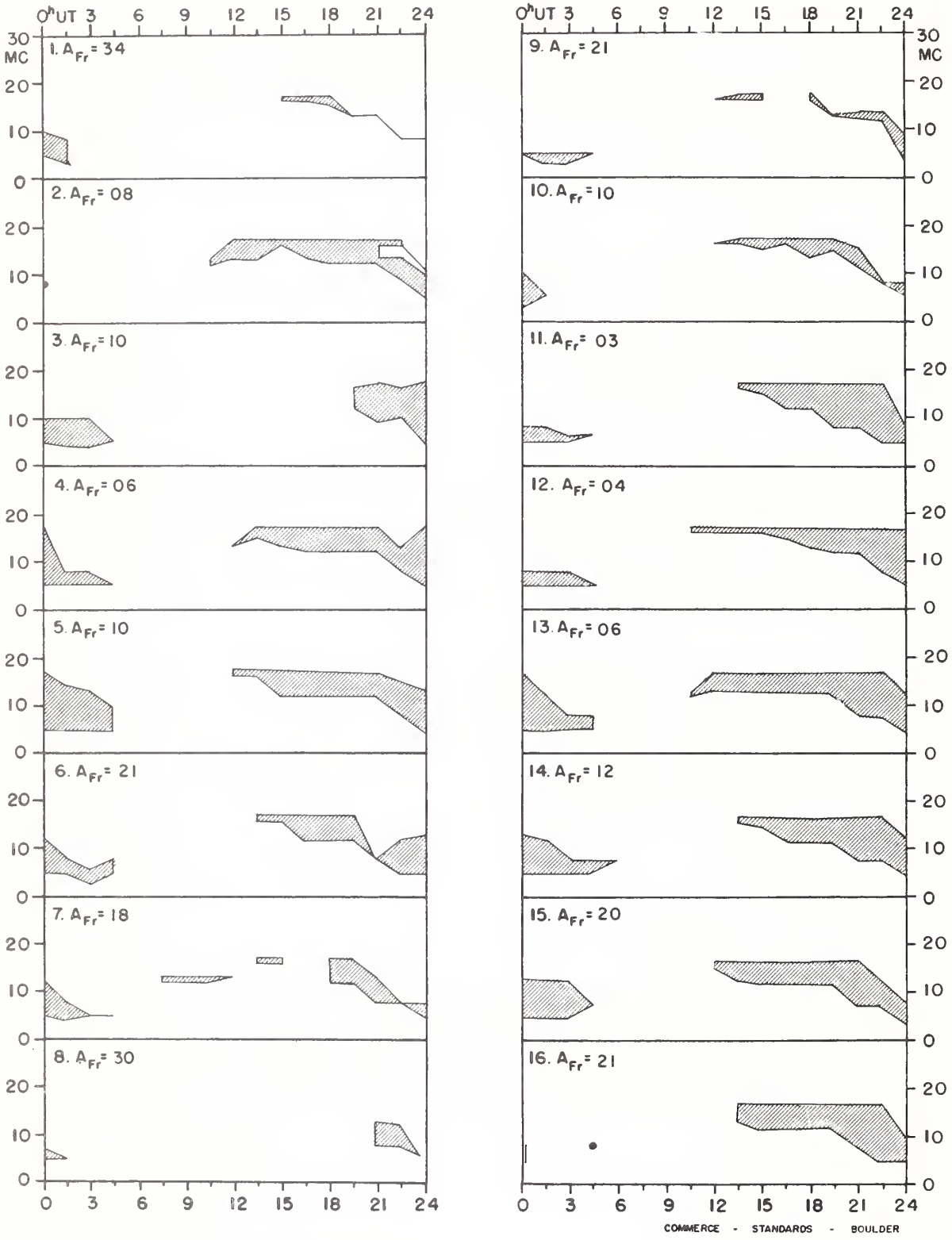


NORTH PACIFIC

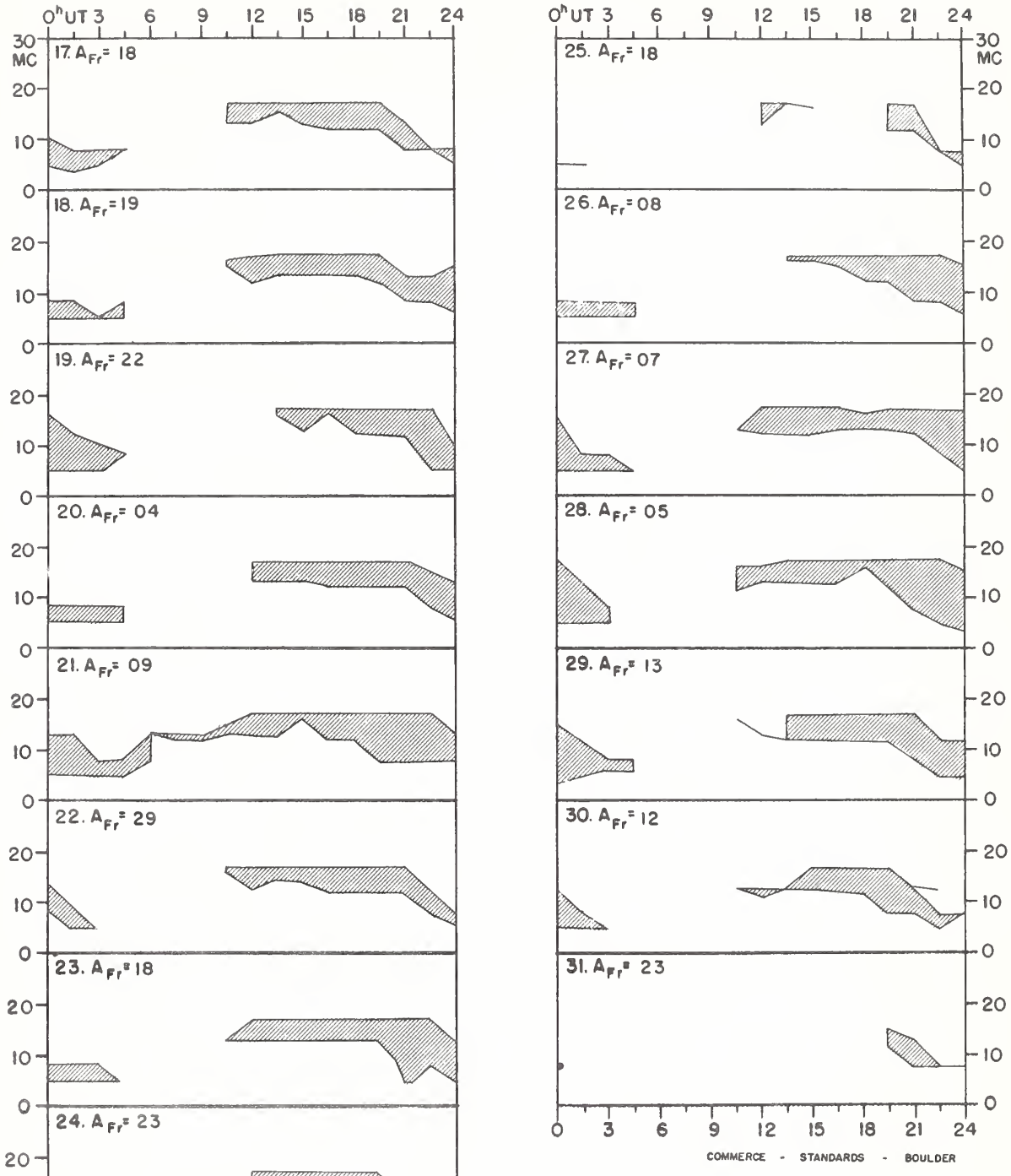


USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

AUGUST 1962



AUGUST 1962



Errata:
In CRPL - F217B, September 1962 page VIId, A_{FR} = 04 was omitted for July 18, 1962.

Adapted from Observations by Deutsches Bundespost

ALERT PERIODS AND SPECIAL WORLD INTERVALS

INTERNATIONAL WORLD DAY SERVICE

SEPTEMBER 1962

Issued September 1962 Day/Time U. T.	Advance Geophysical Alert	No.	World-Wide Geophysical Alert	Special World Interval
01/1603	McMath, Solar Flare, One Plus 01/1349Z			
02/1700	Lockheed, Solar Flare, One Plus 02/1617Z			
03/2345	McMath, Solar Flare, Two 03/1832Z			
04/2315	Lockheed Solar Flare, One Plus 04/2135Z			
07/1615	Sac Peak, Solar Flare, Two 07/1525Z			
12/1225	Ft. Belvoir, Magnetic Storm 12/0520Z			
12/1600		178	Magnetic Storm, Aurora Probable 12/0520Z	Start
13/1600		179		Finish
29/1850	Lockheed, Solar Flare, One Plus 29/1815Z			
30/1600		180	Magnetic Storm, 29/19XXZ	
30/1850	Lockheed, Solar Flare, One Plus 30/1815Z			

COMMERCE - STANDARDS - BOULDER